

# ***Short and Long-Term Outlook for Energy Markets***

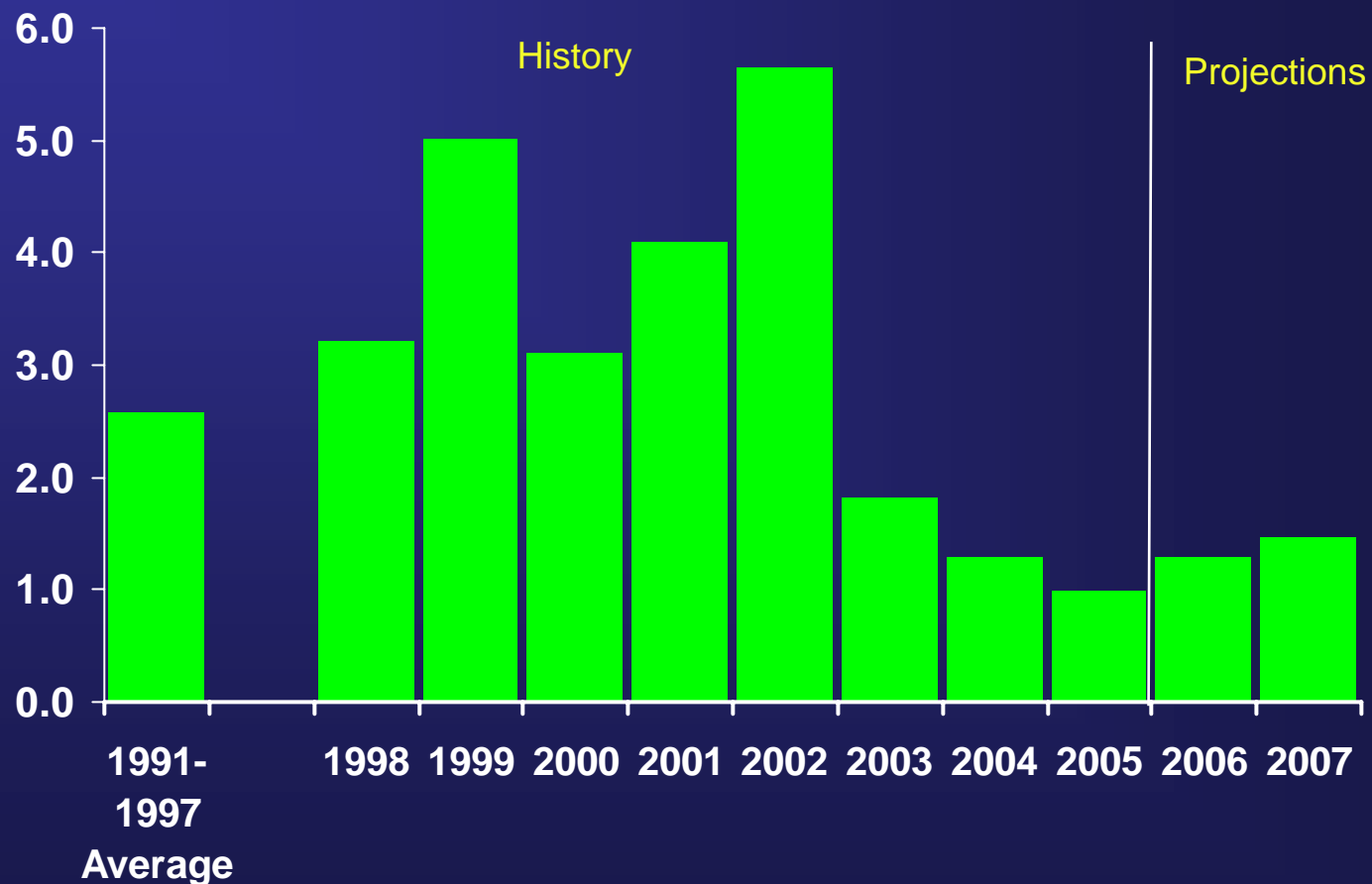
**Guy Caruso, Administrator  
Energy Information Administration**

**Global Policy Group  
November 28, 2006  
Washington, DC**

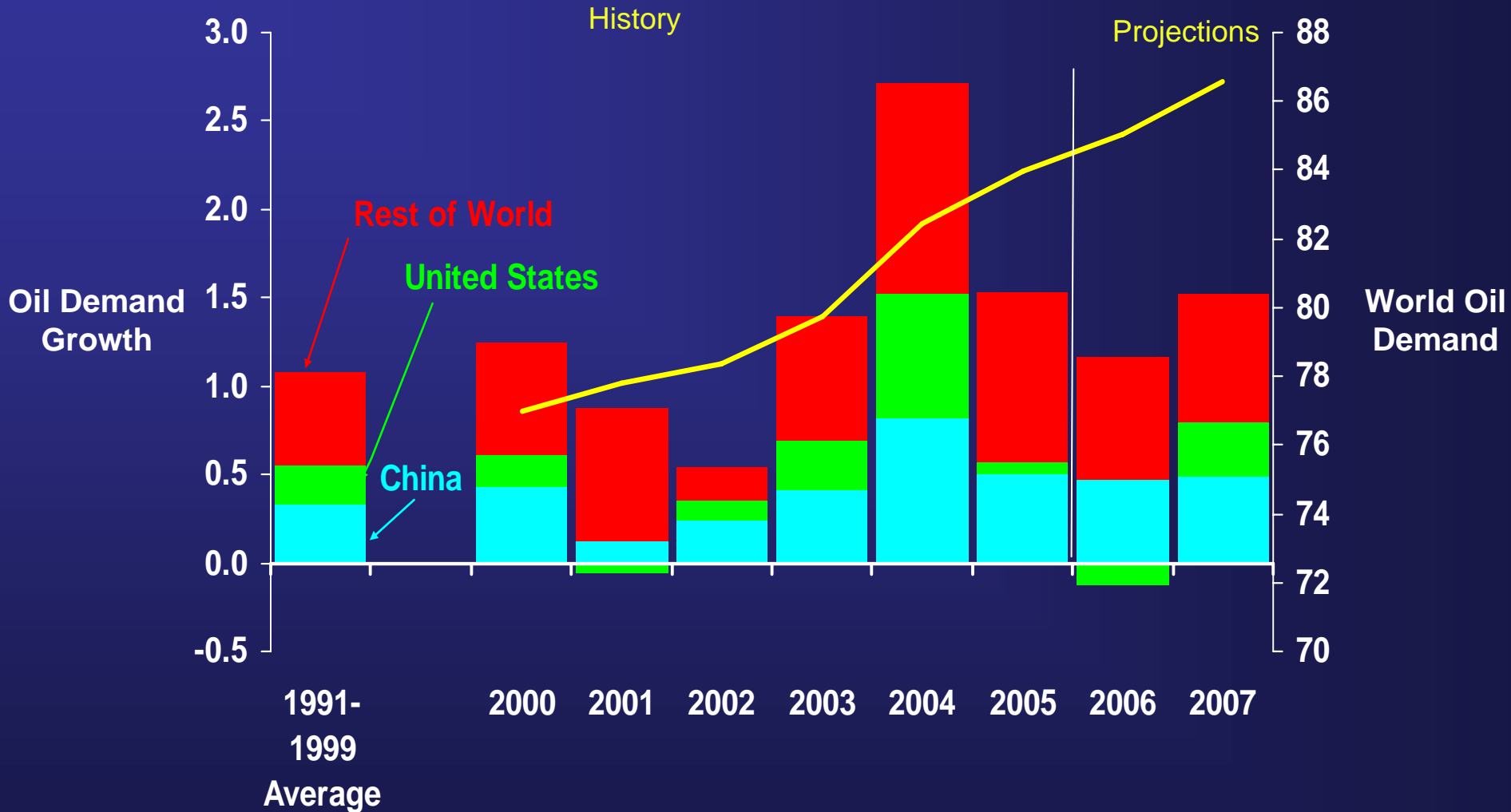
## West Texas Intermediate Crude Oil Price (dollars per barrel)



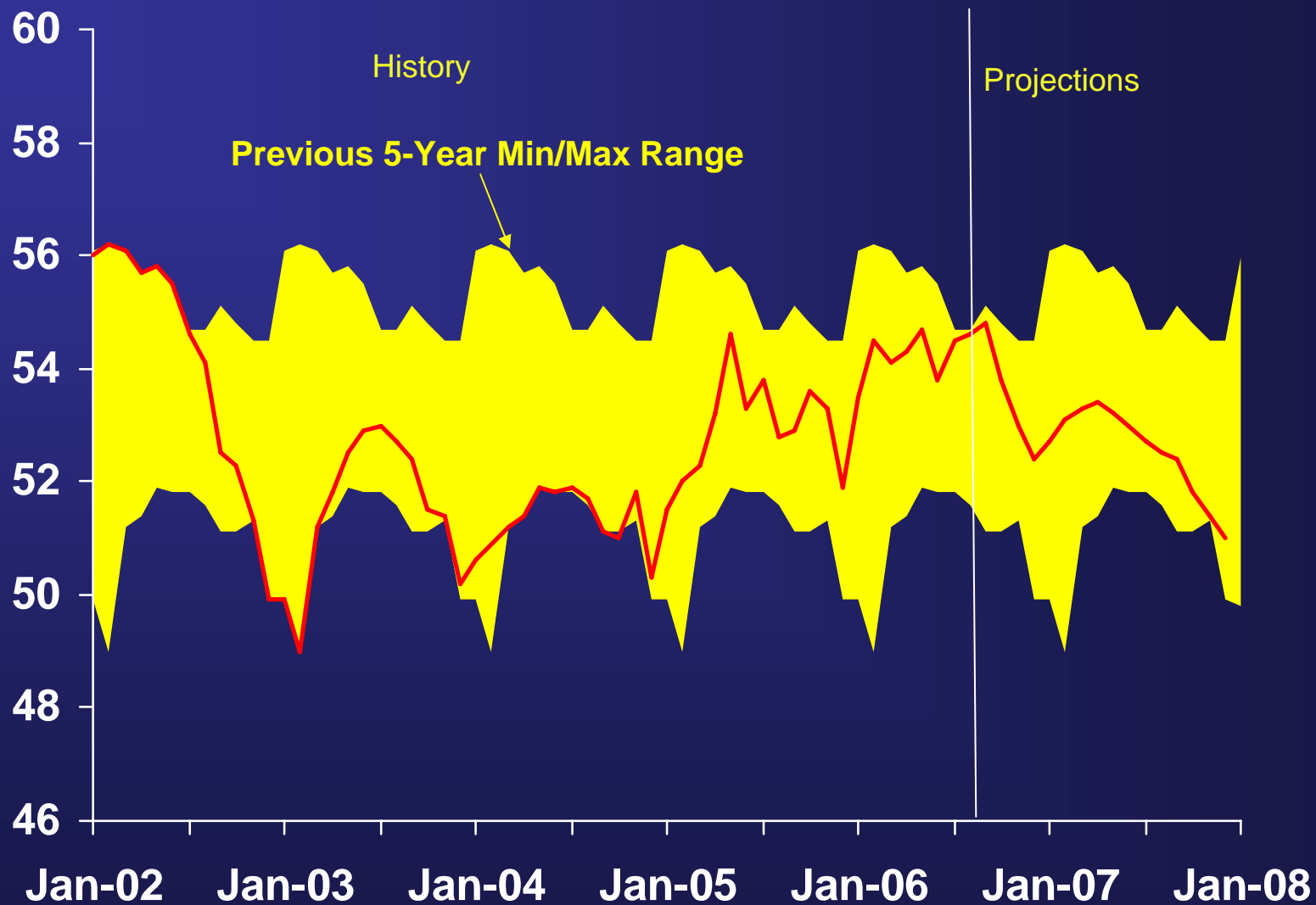
# World Oil Surplus Production Capacity (million barrels per day)



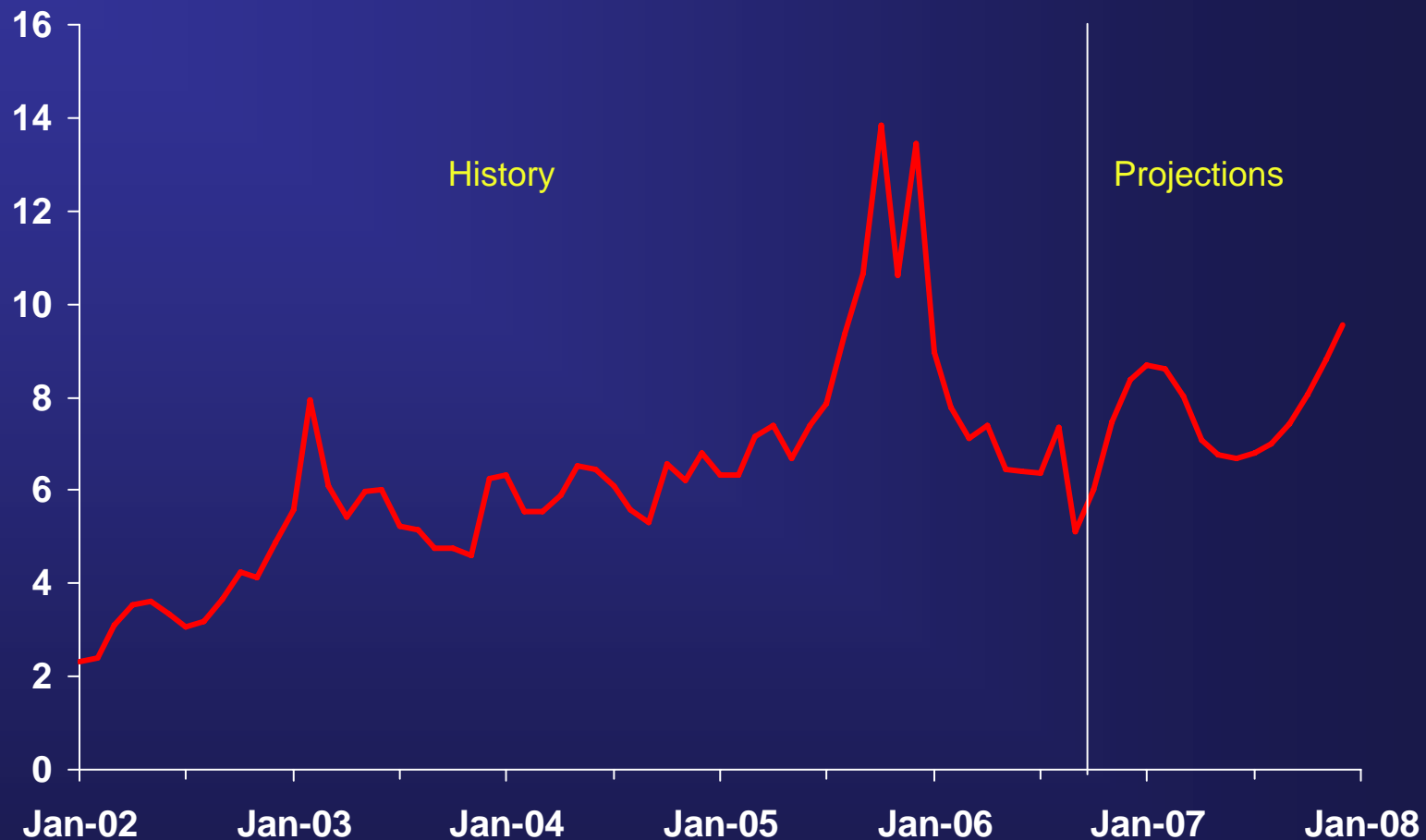
# World Oil Consumption Growth (million barrels per day)



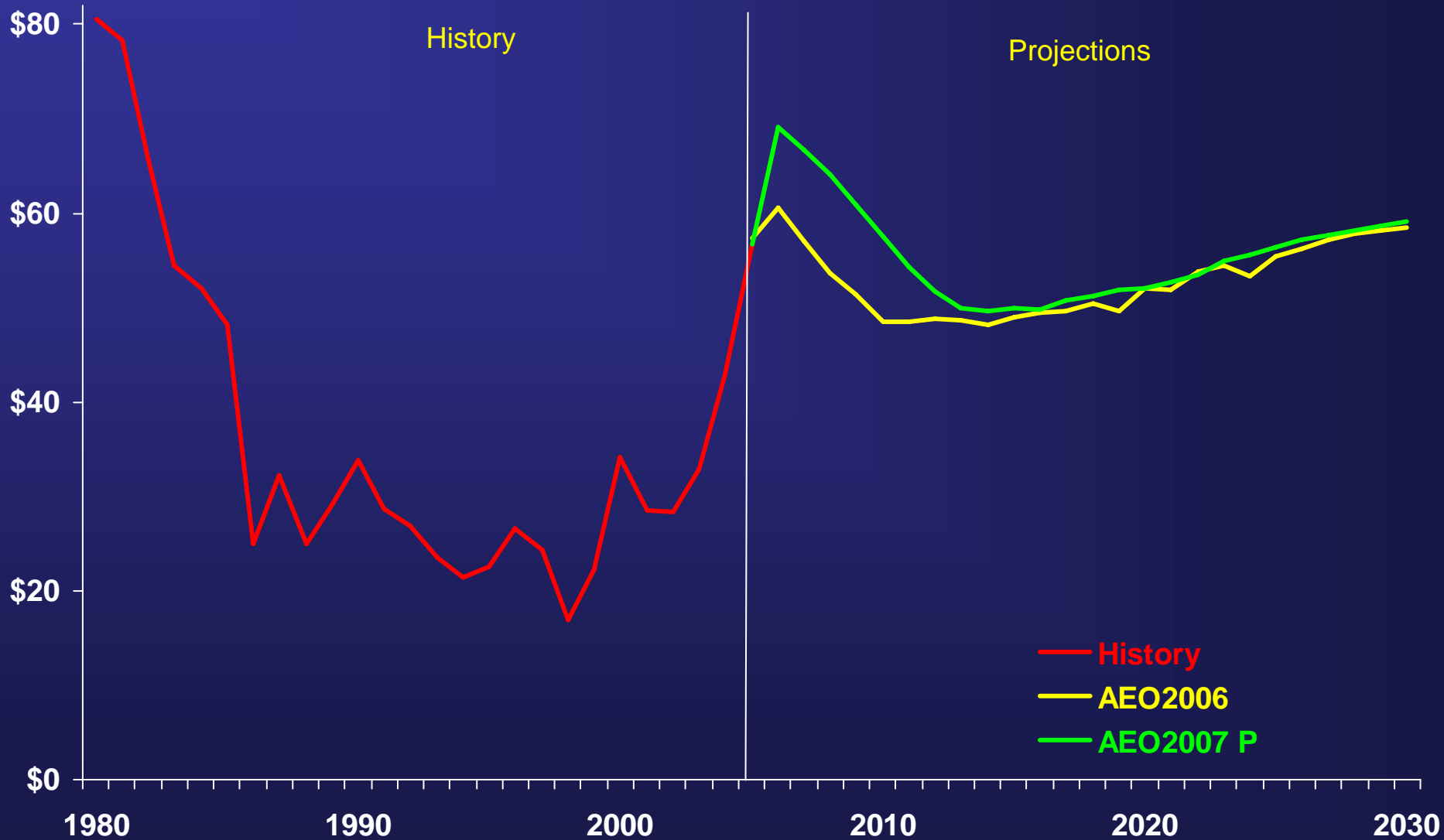
## Days of Supply of OECD Commercial Oil Stocks



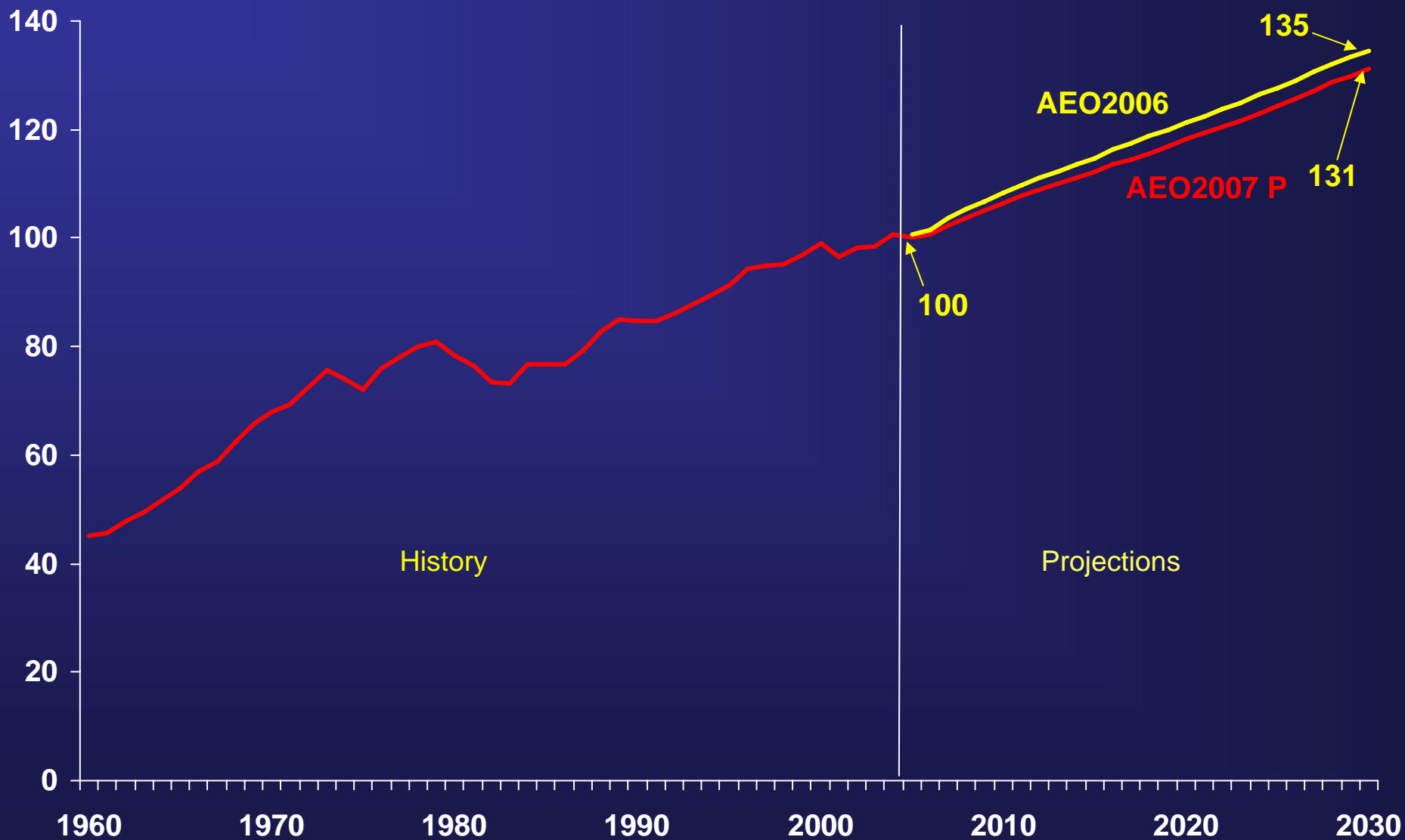
# U.S. Natural Gas Henry Hub Spot Prices (dollars per thousand cubic feet)



# World Oil Price, 1980-2030 (2005 dollars per barrel)

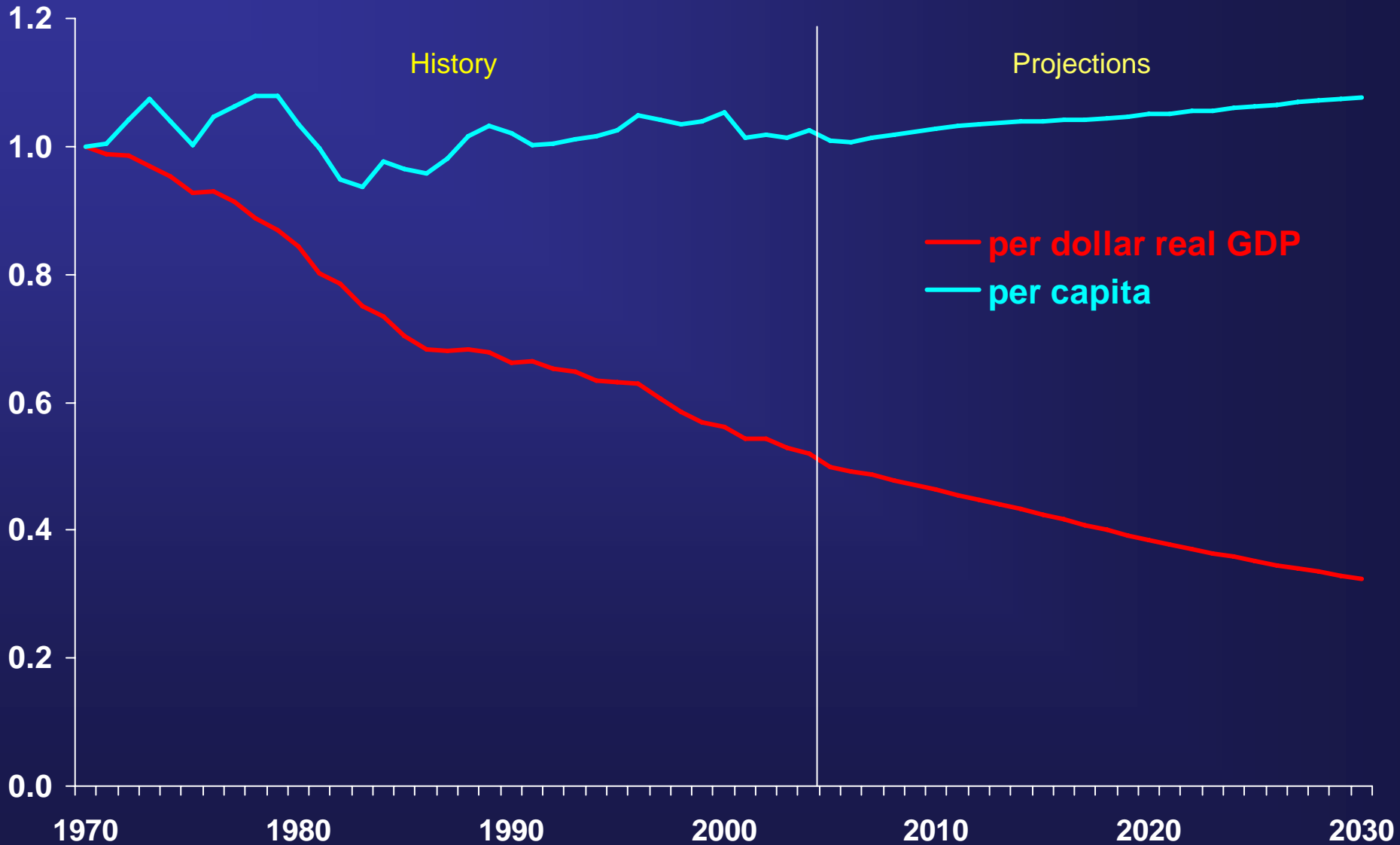


# U.S. Primary Energy Consumption, 1960-2030 (quadrillion Btu)

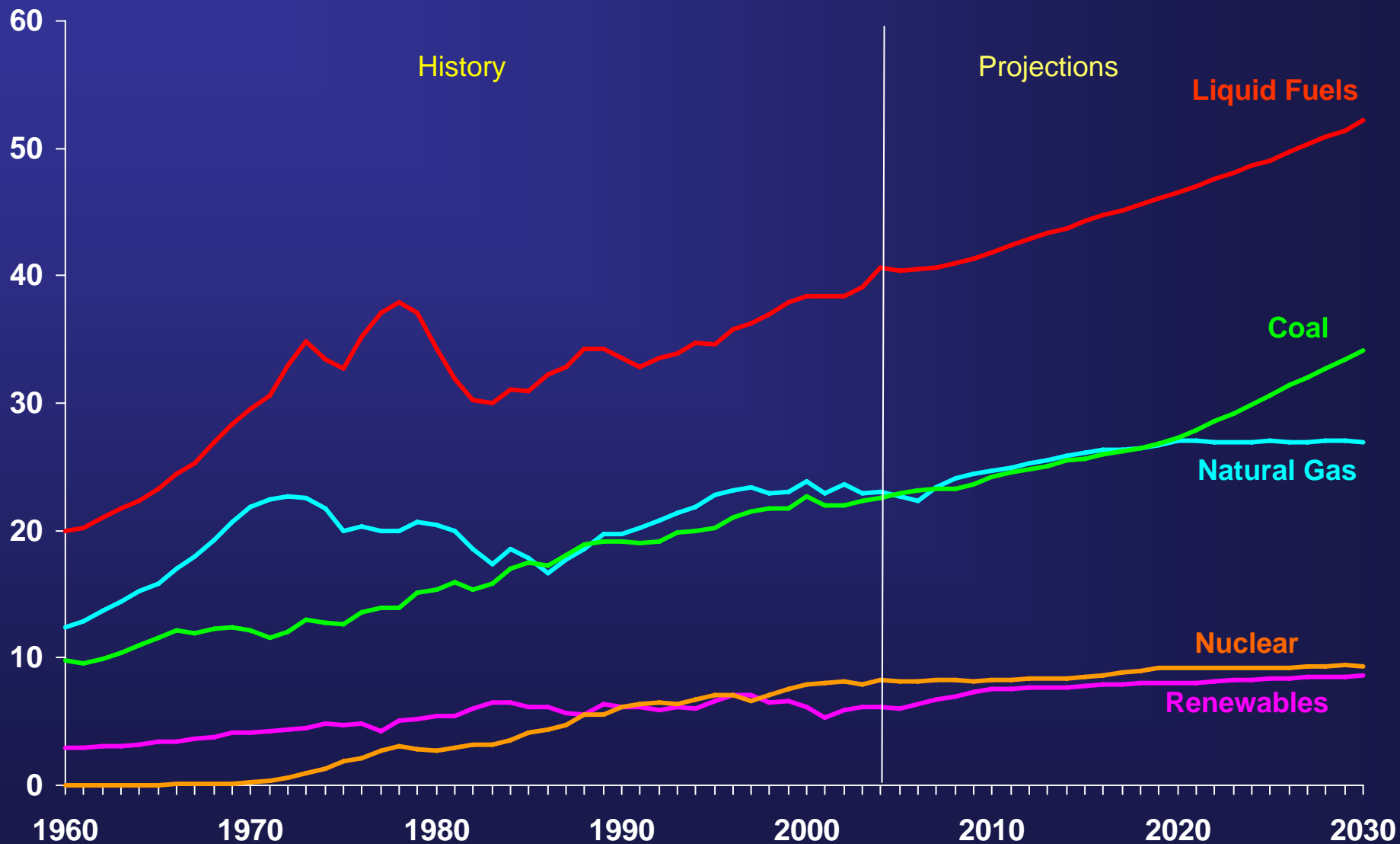




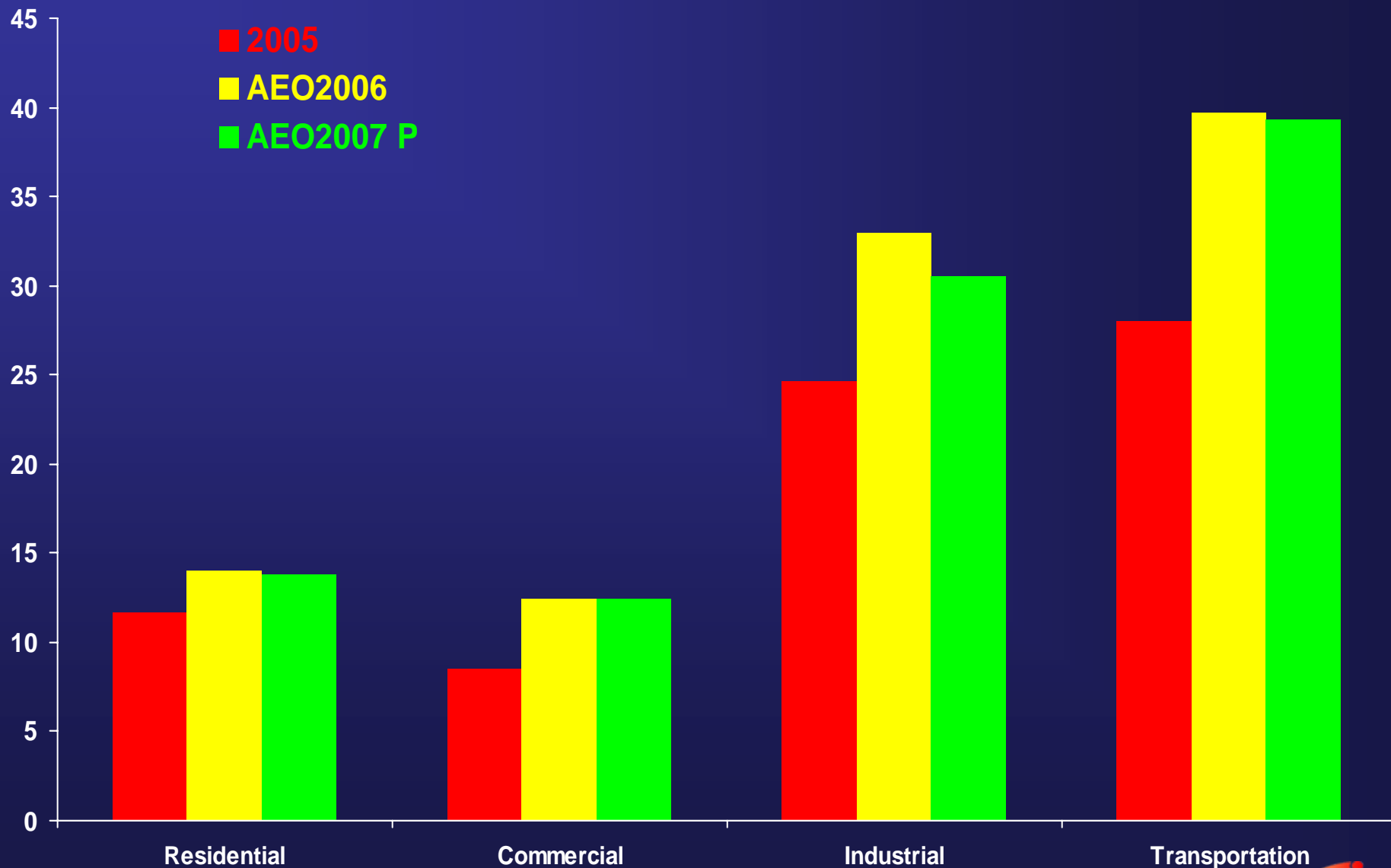
# U.S. Energy Use per Capita and per Dollar of Real Gross Domestic Product, 1970-2030 (index, 1970 = 1)



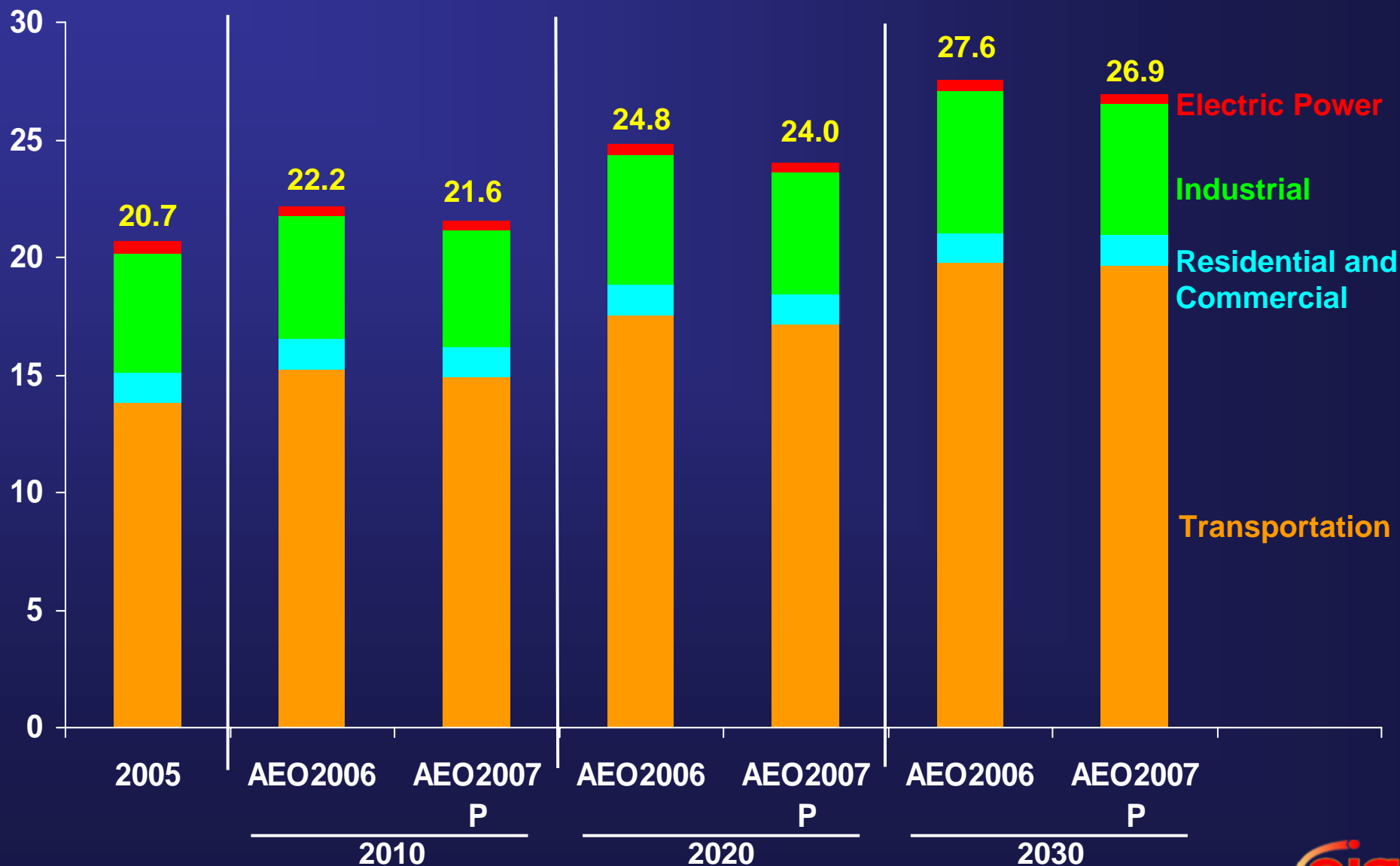
# U.S. Primary Energy Consumption by Fuel, 1960-2030 (quadrillion Btu)



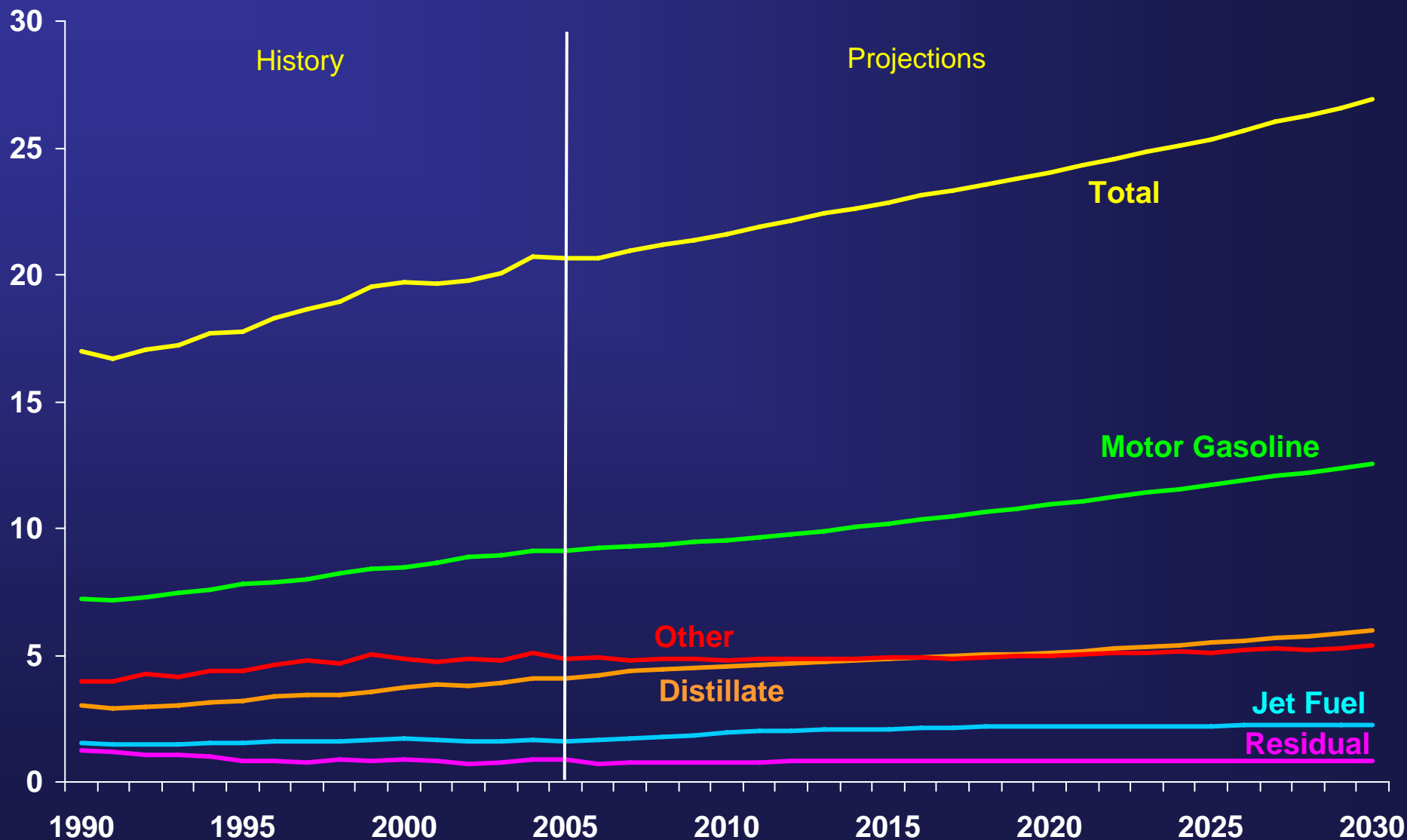
# U.S. Delivered Energy Consumption by Sector, 2005 and 2030 (quadrillion Btu)



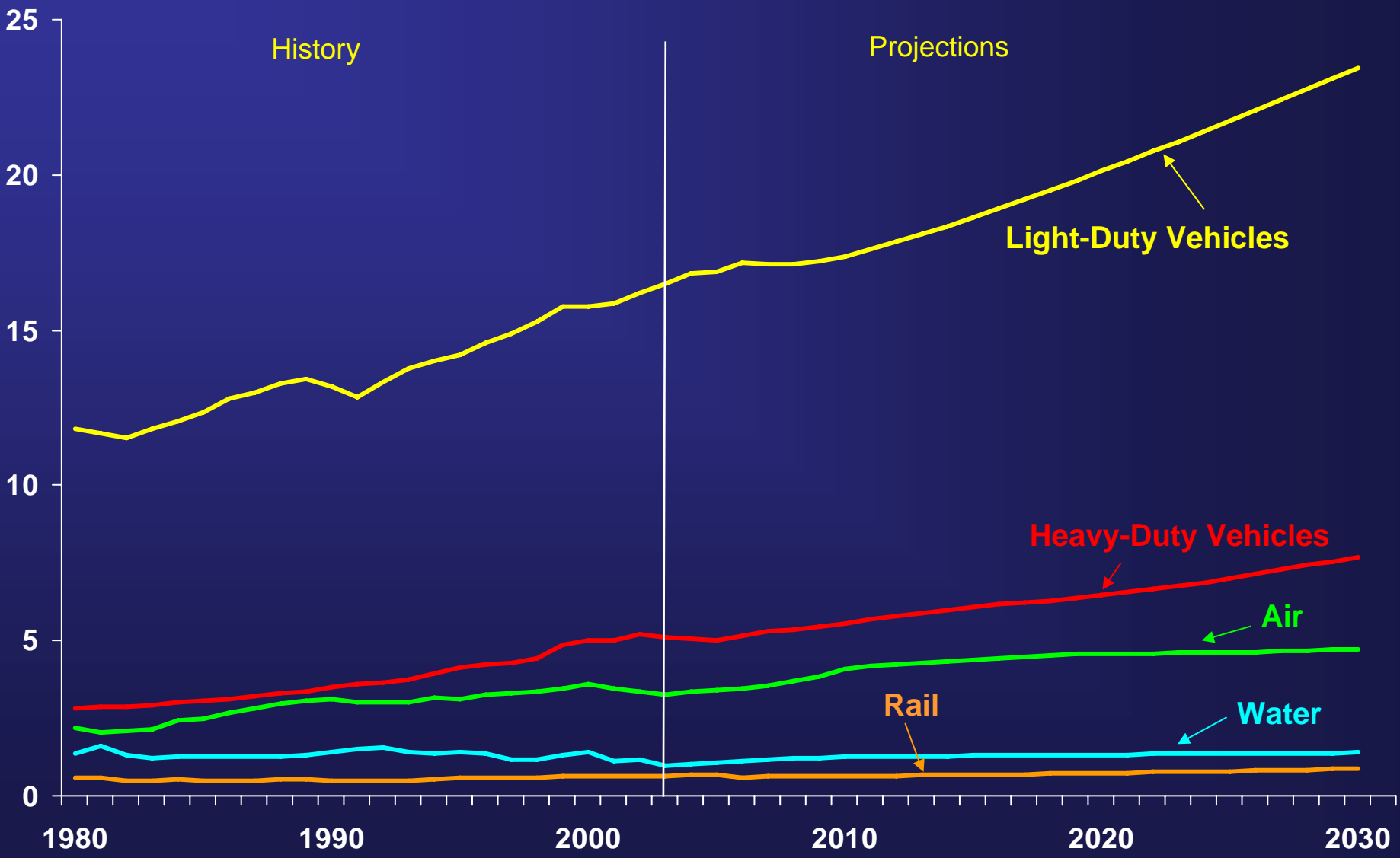
# U.S. Liquid Fuels Consumption by Sector, 2005, 2010, 2020, and 2030 (millions of barrels per day)



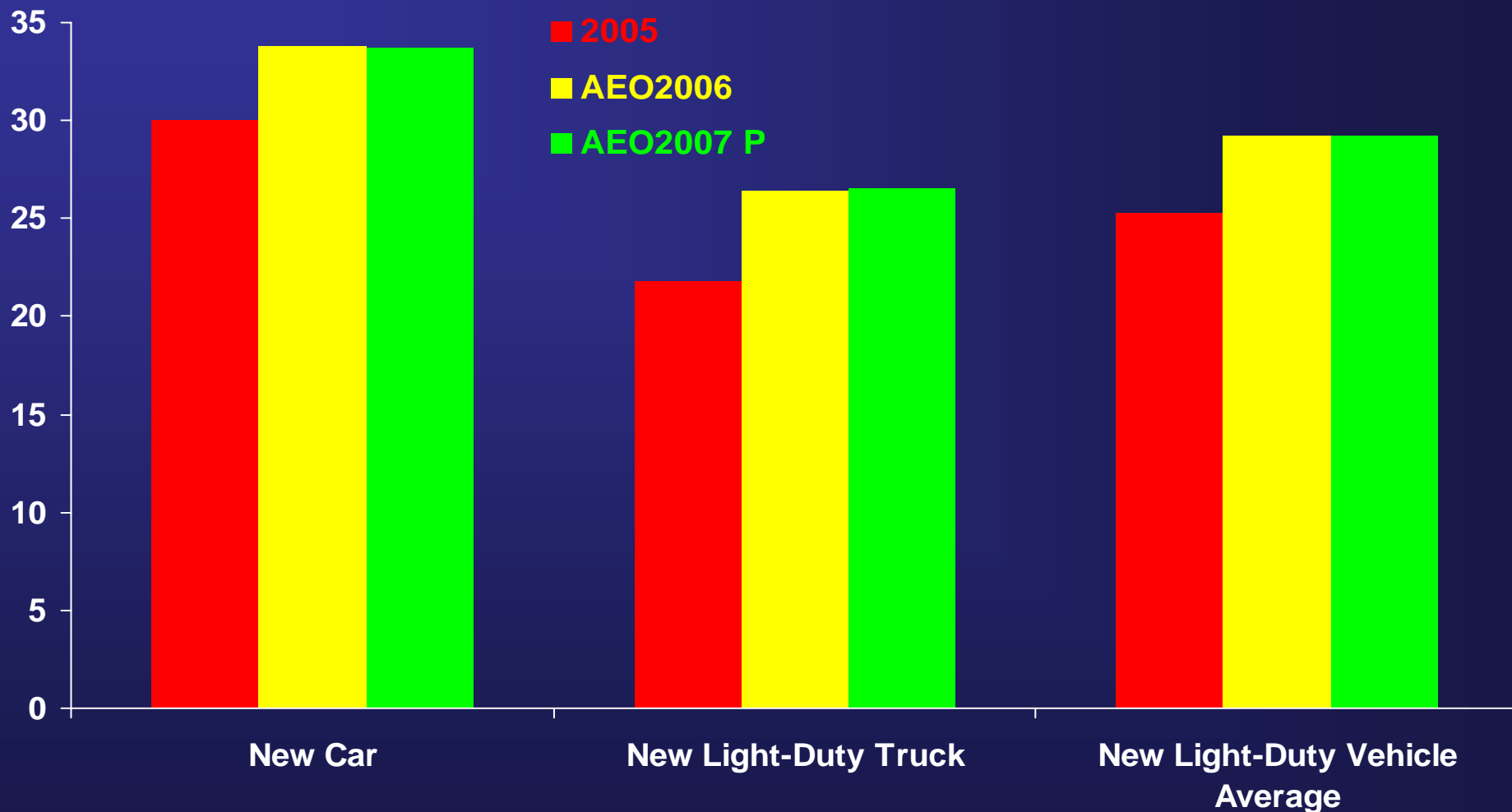
# U.S. Liquid Products Consumption, 1990-2030 (million barrels per day)



# U.S. Transportation Energy Consumption by Mode, 1980-2030 (quadrillion Btu)

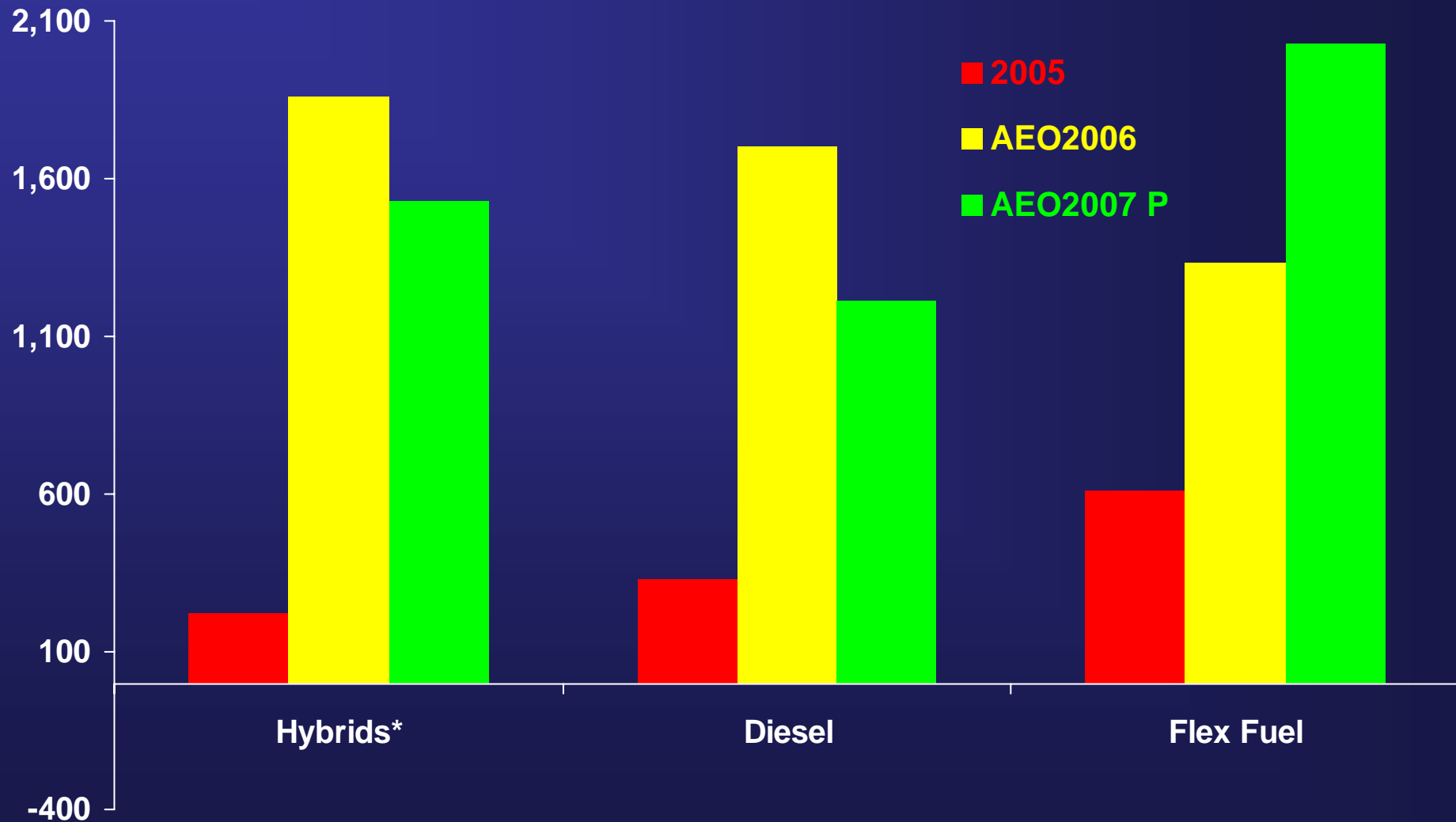


# U.S. New Light-Duty Vehicle Efficiency, 2005 and 2030 (miles per gallon)



Note: Does not include impact of proposed increase in fuel economy standards based on vehicle footprint for light trucks.

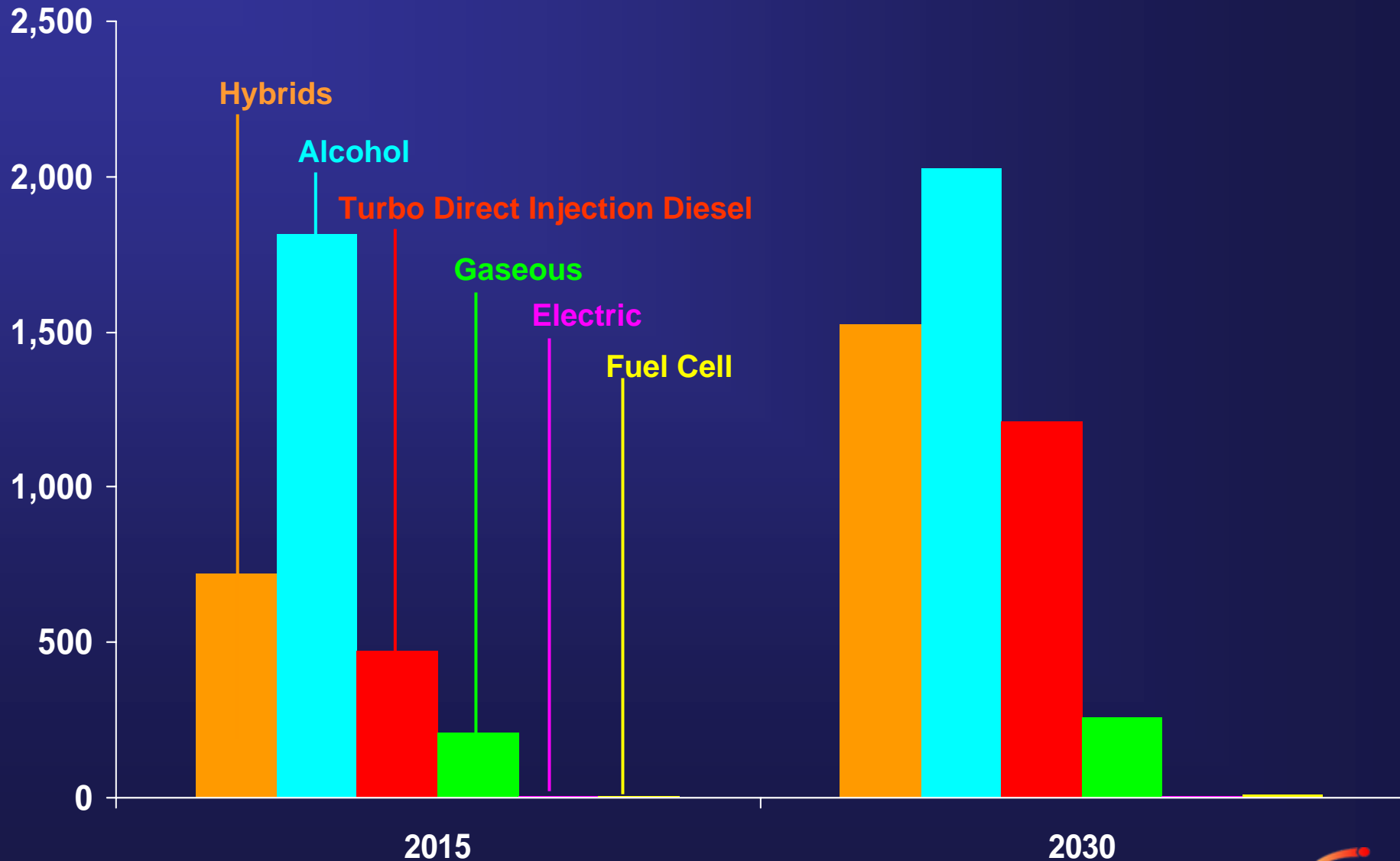
# U.S. Sales of Full Hybrid, Diesel, and Flex Fuel Vehicles, 2005 and 2030 (thousand units)



\*Only includes hybrids that provide tractive power to the vehicle.



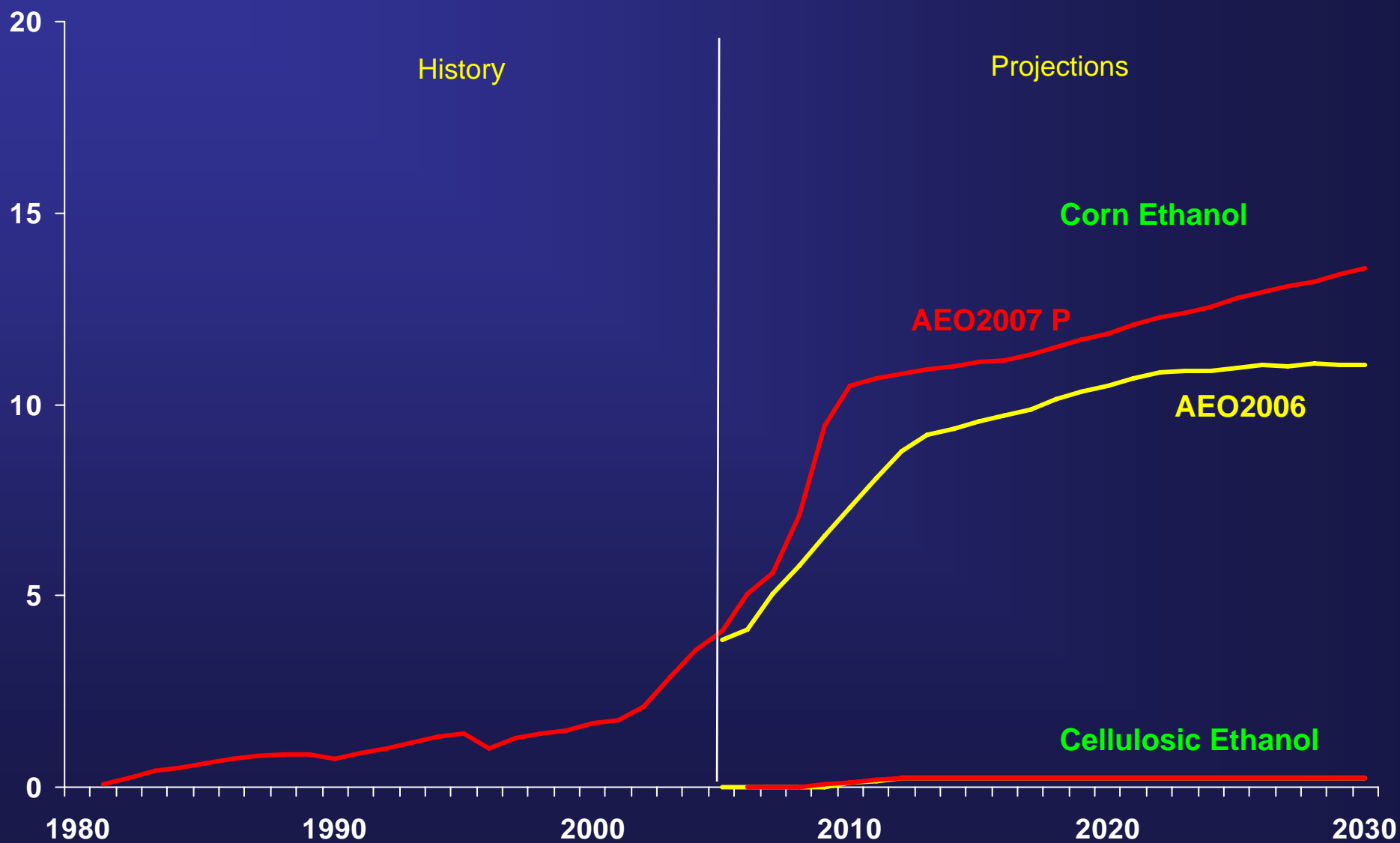
# Sales of U.S. Non-Conventional Light-Duty Vehicles, 2015 and 2030 (thousand vehicles sold)



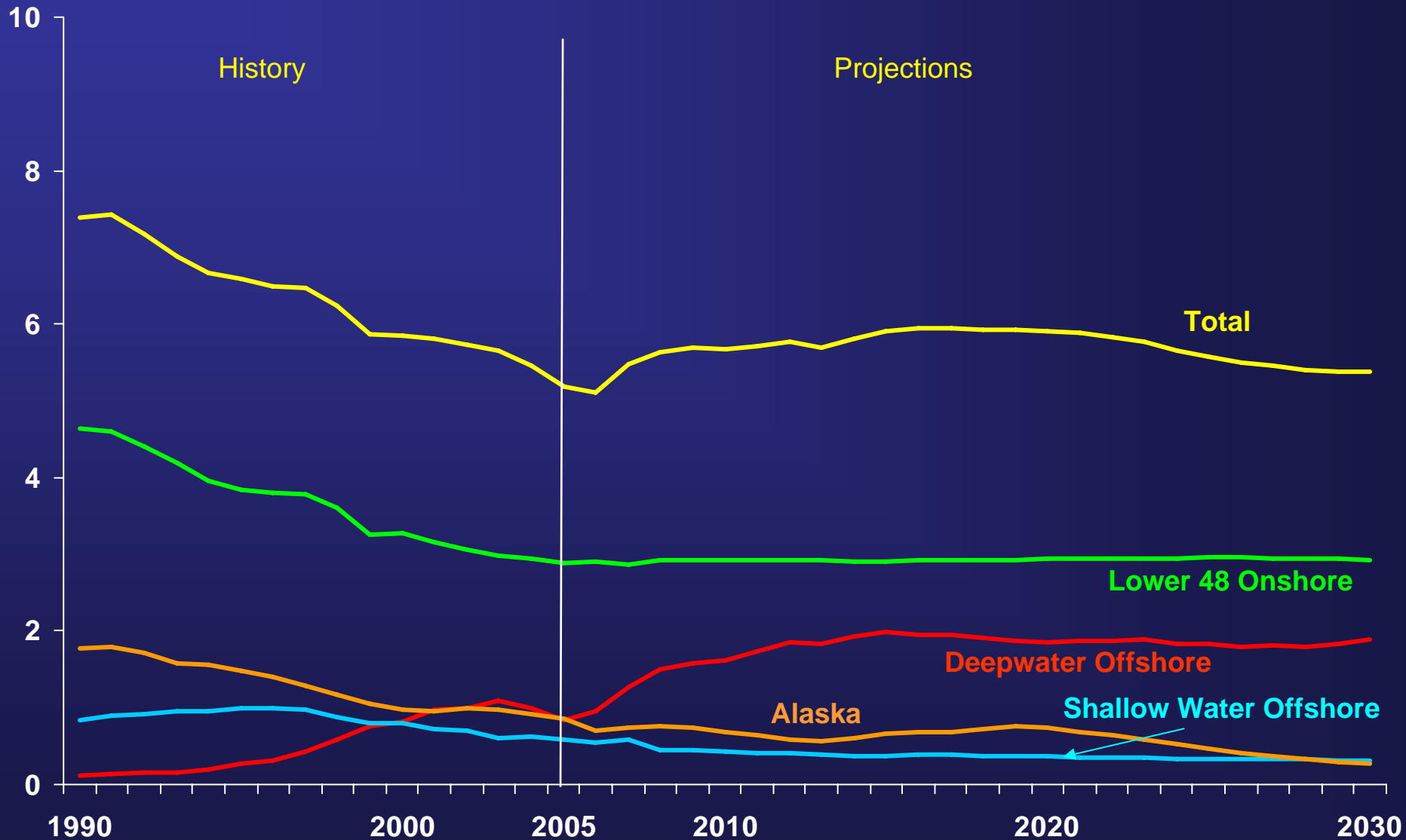
2015

2030

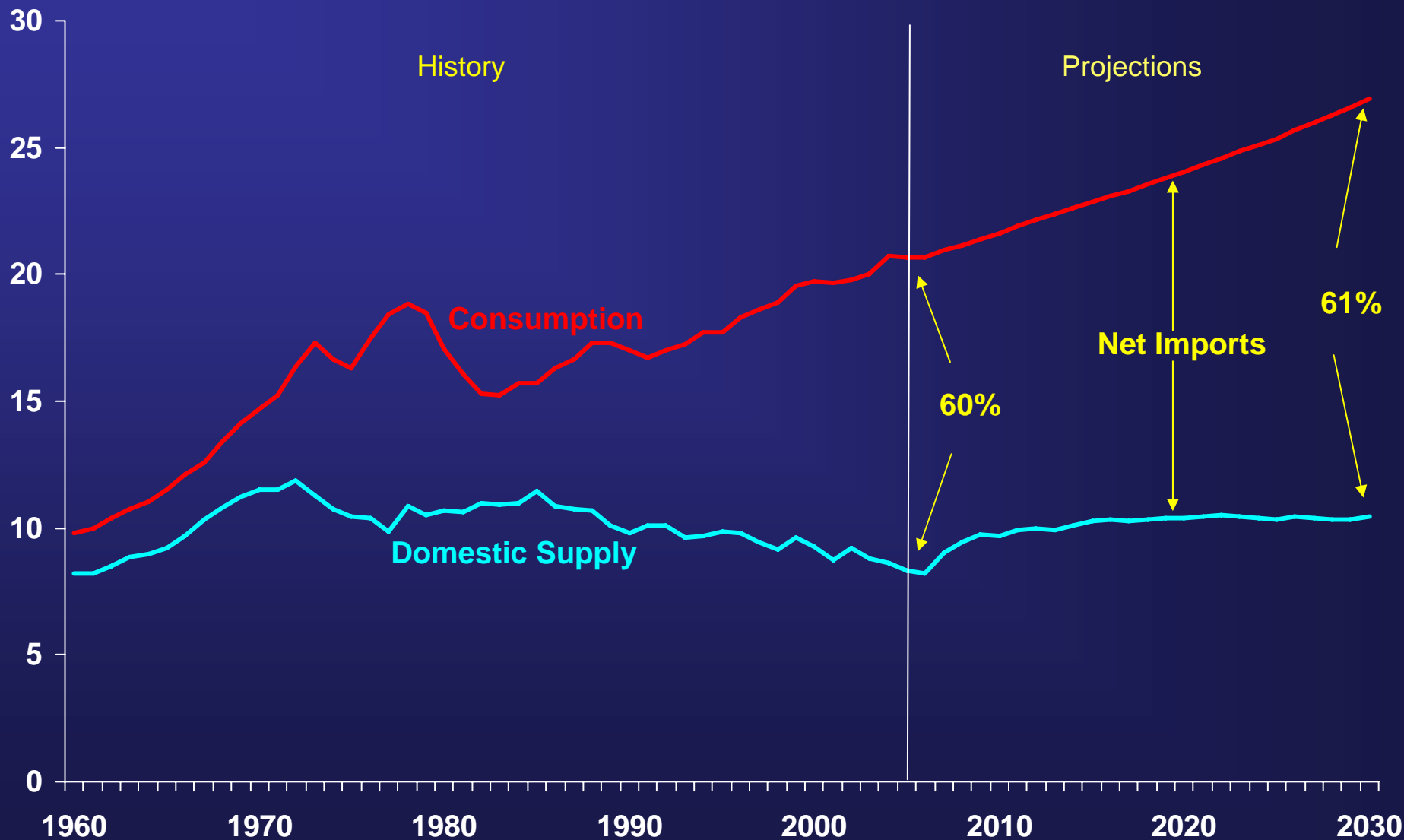
# U.S. Ethanol Production, 1981-2030 (billion gallons)



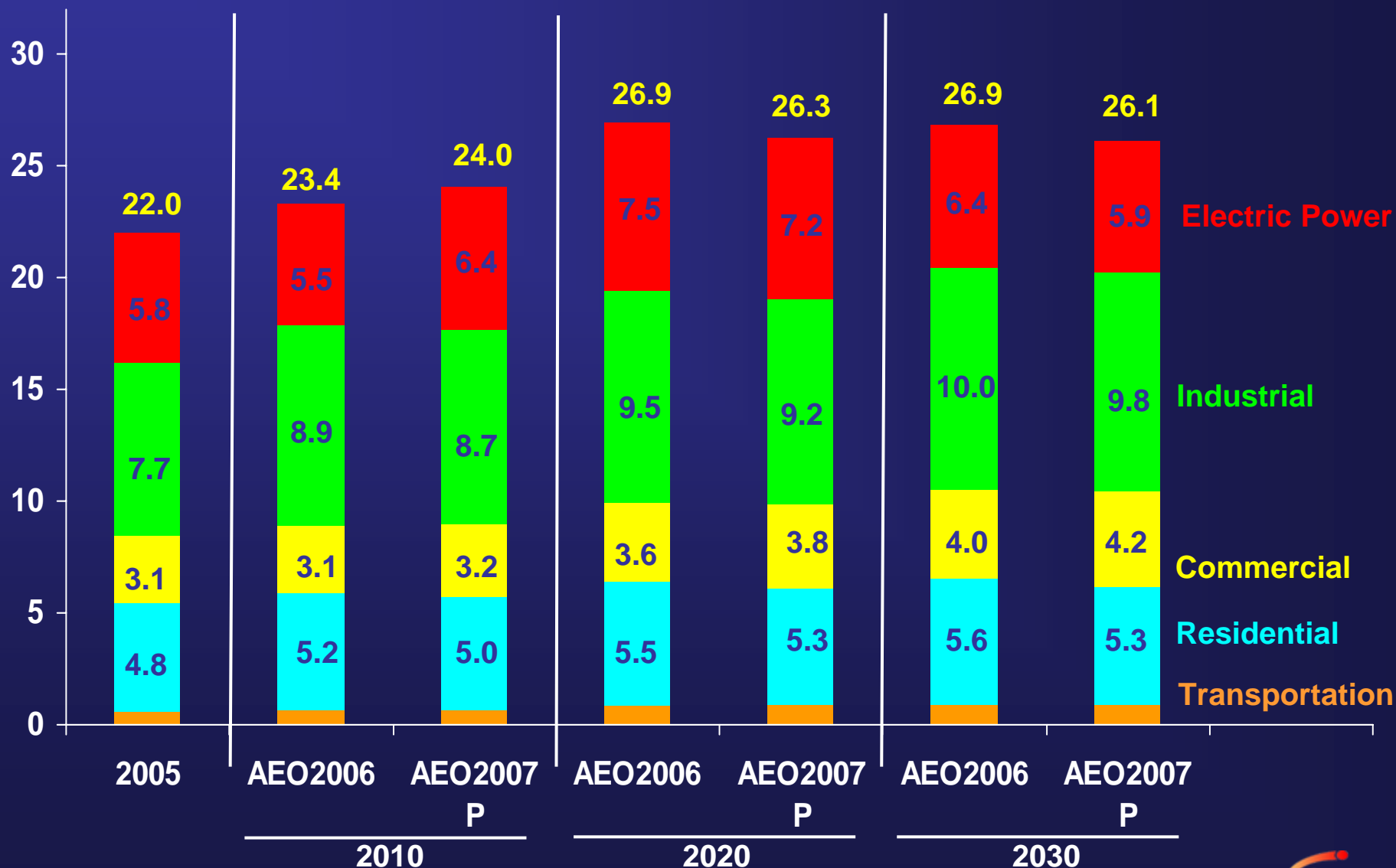
# U.S. Crude Oil Production by Source, 1990-2030 (million barrels per day)



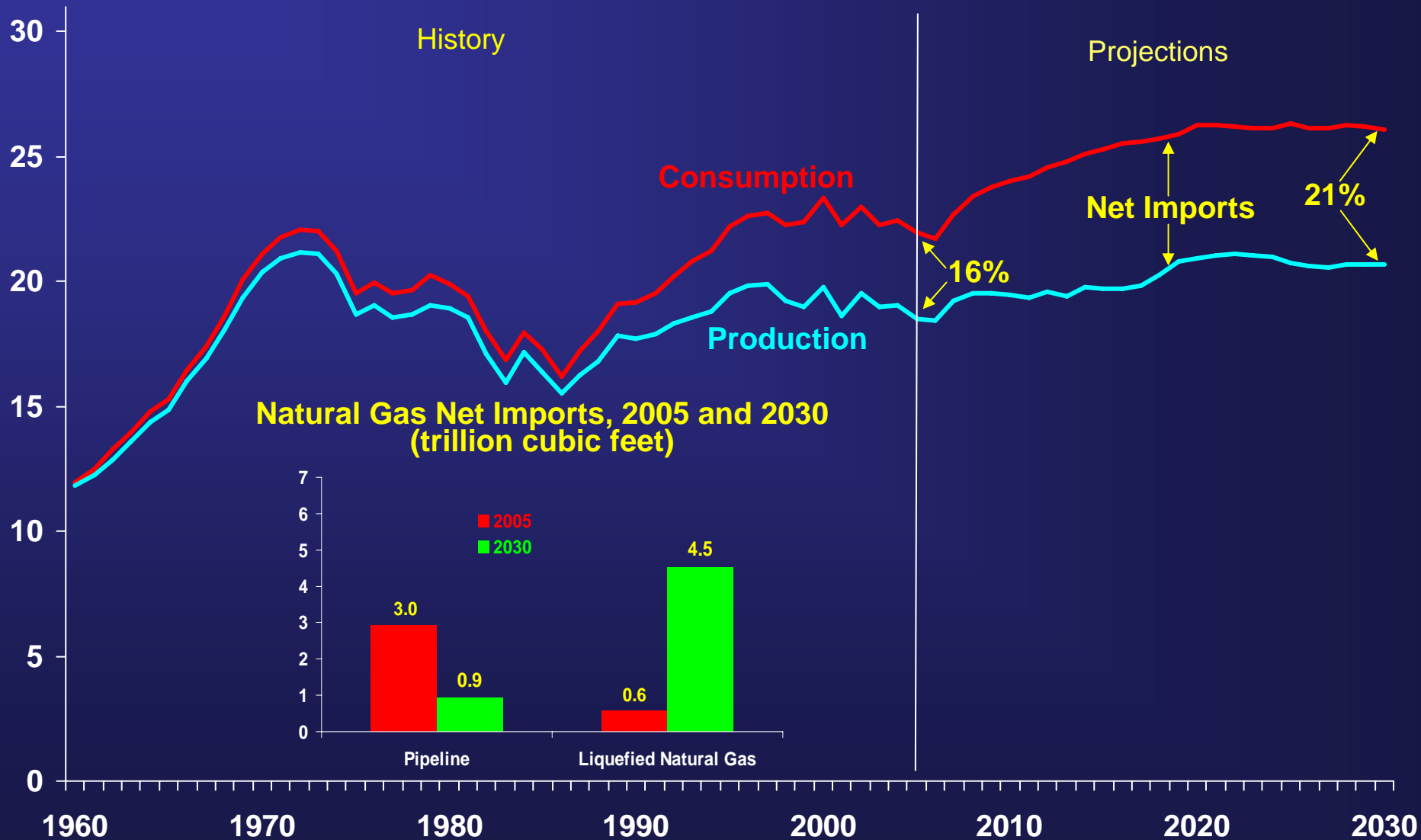
# U.S. Petroleum Supply, Consumption, and Net Imports, 1960-2030 (million barrels per day)



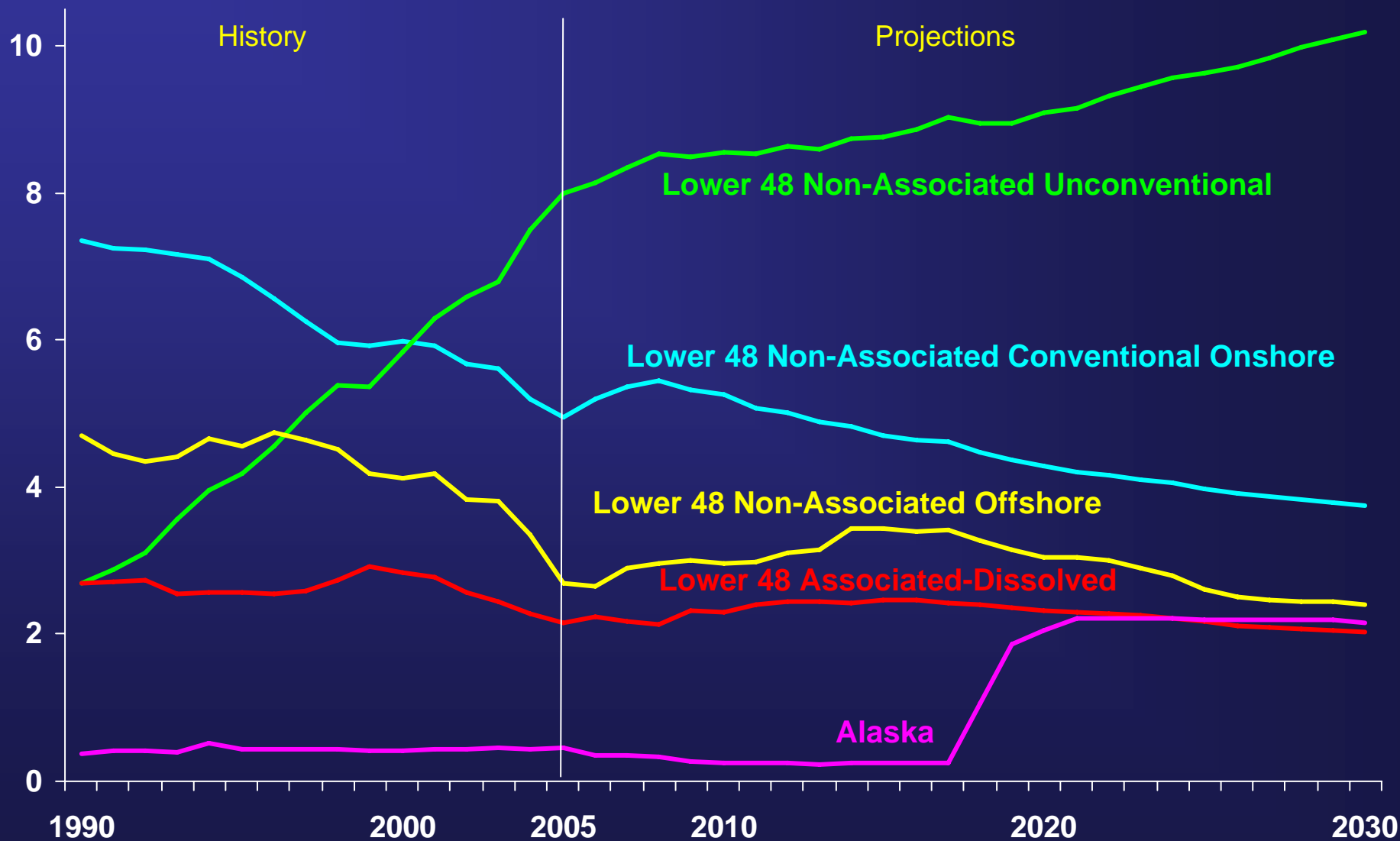
# U.S. Natural Gas Consumption by Sector, 2005, 2010, 2020, and 2030 (trillion cubic feet)



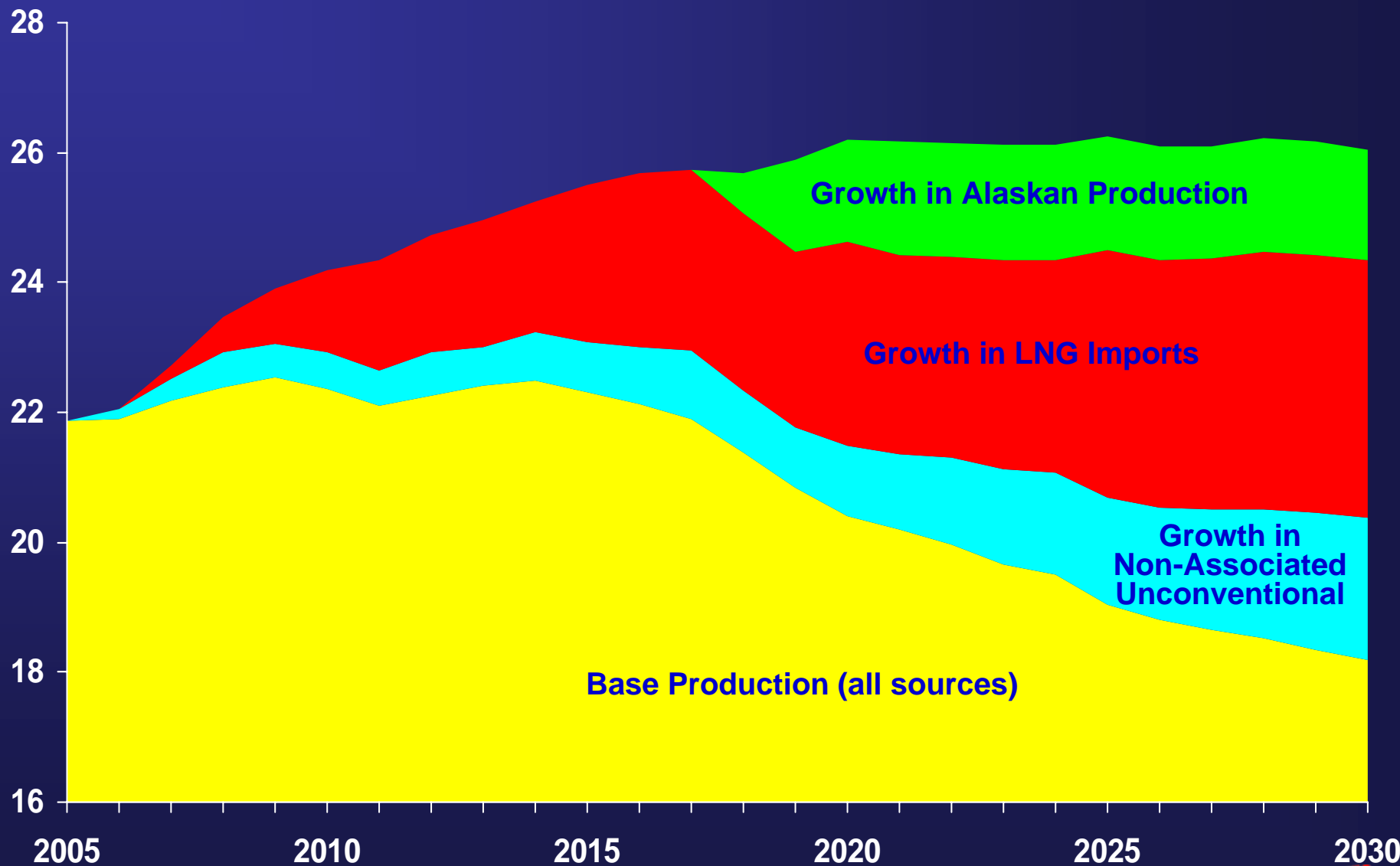
# U.S. Natural Gas Production, Consumption, and Net Imports, 1960-2030 (trillion cubic feet)



# U.S. Natural Gas Production by Source, 1990-2030 (trillion cubic feet)

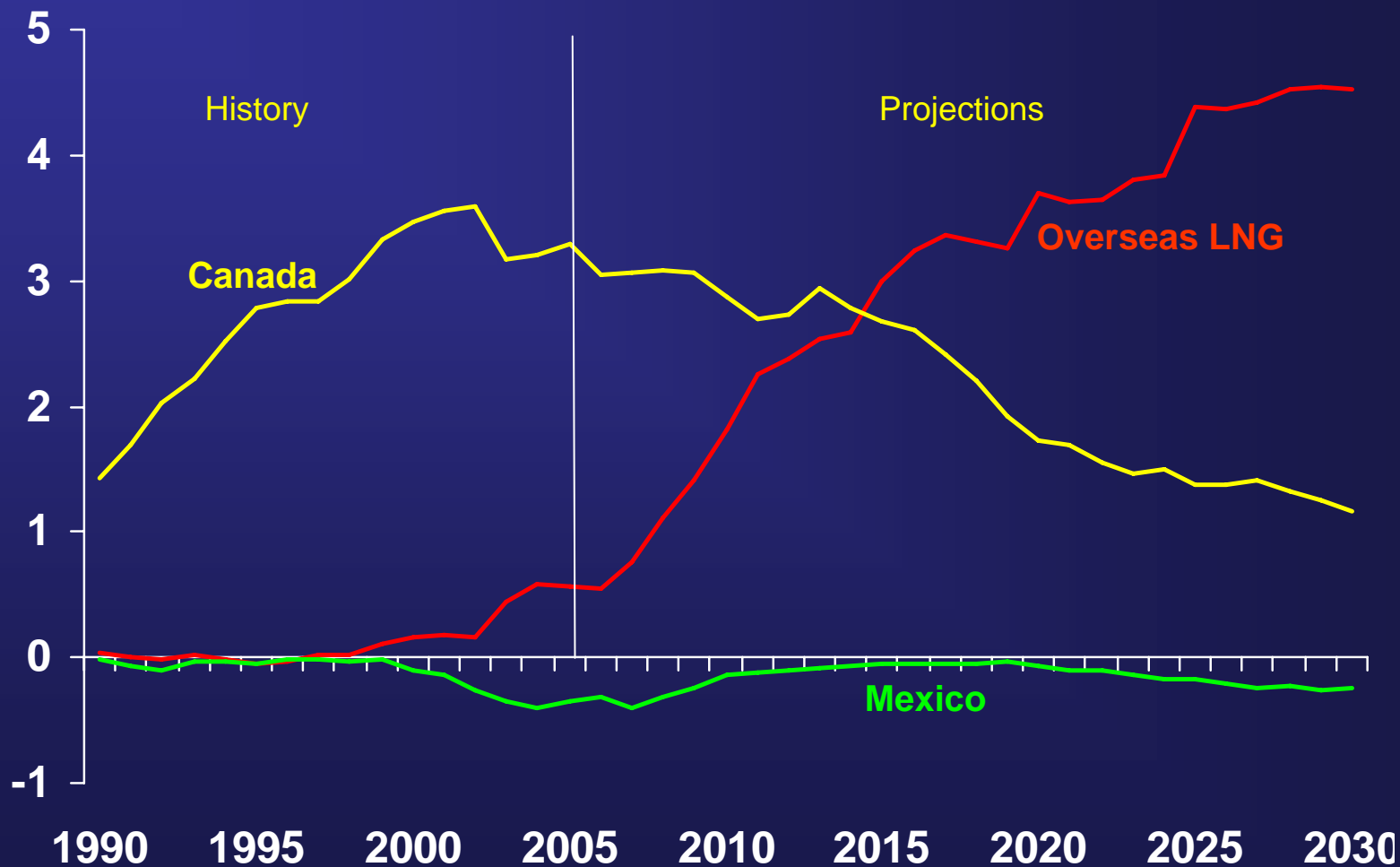


# Major Sources of Incremental U.S. Natural Gas Supply, 2006-2030 (trillion cubic feet)

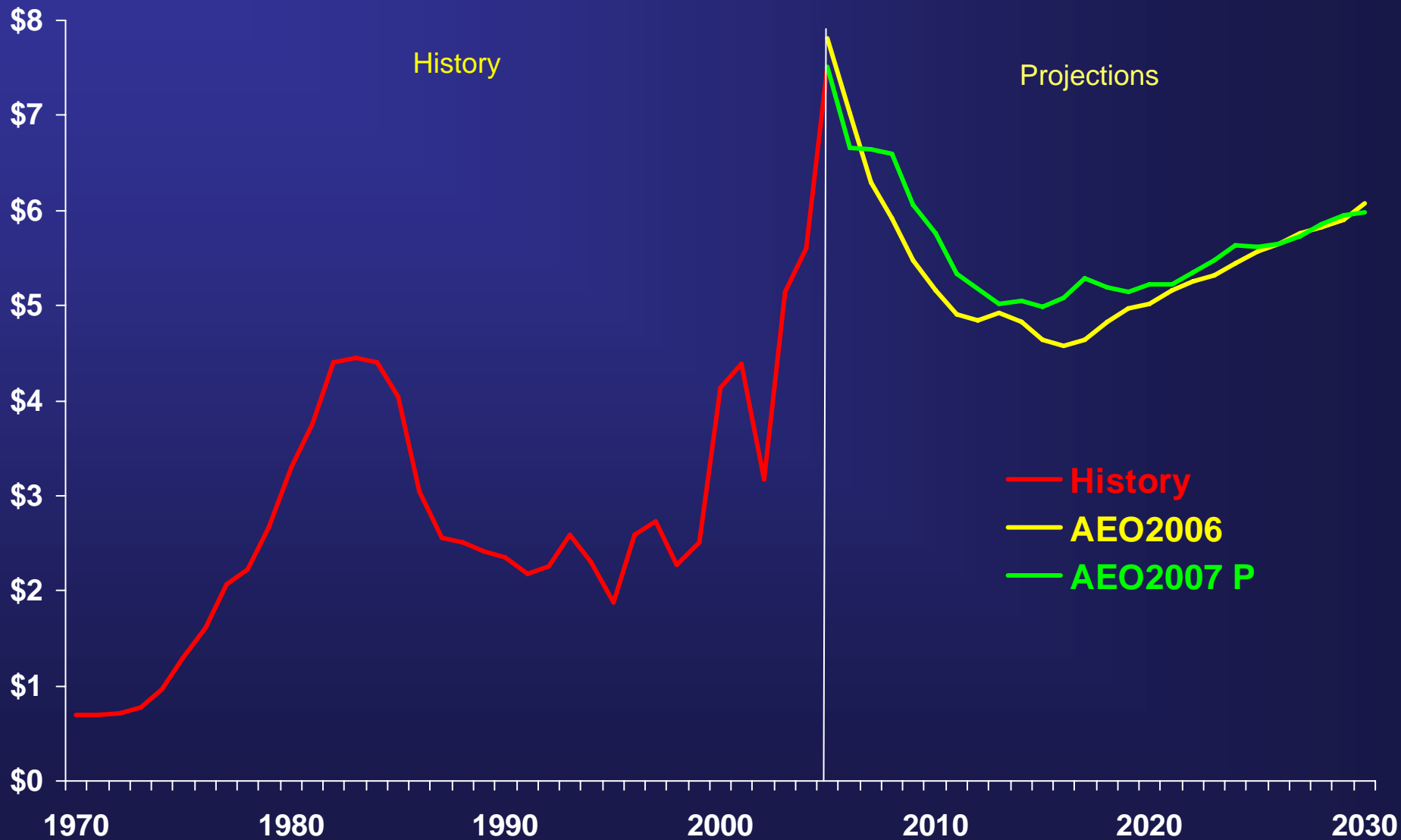




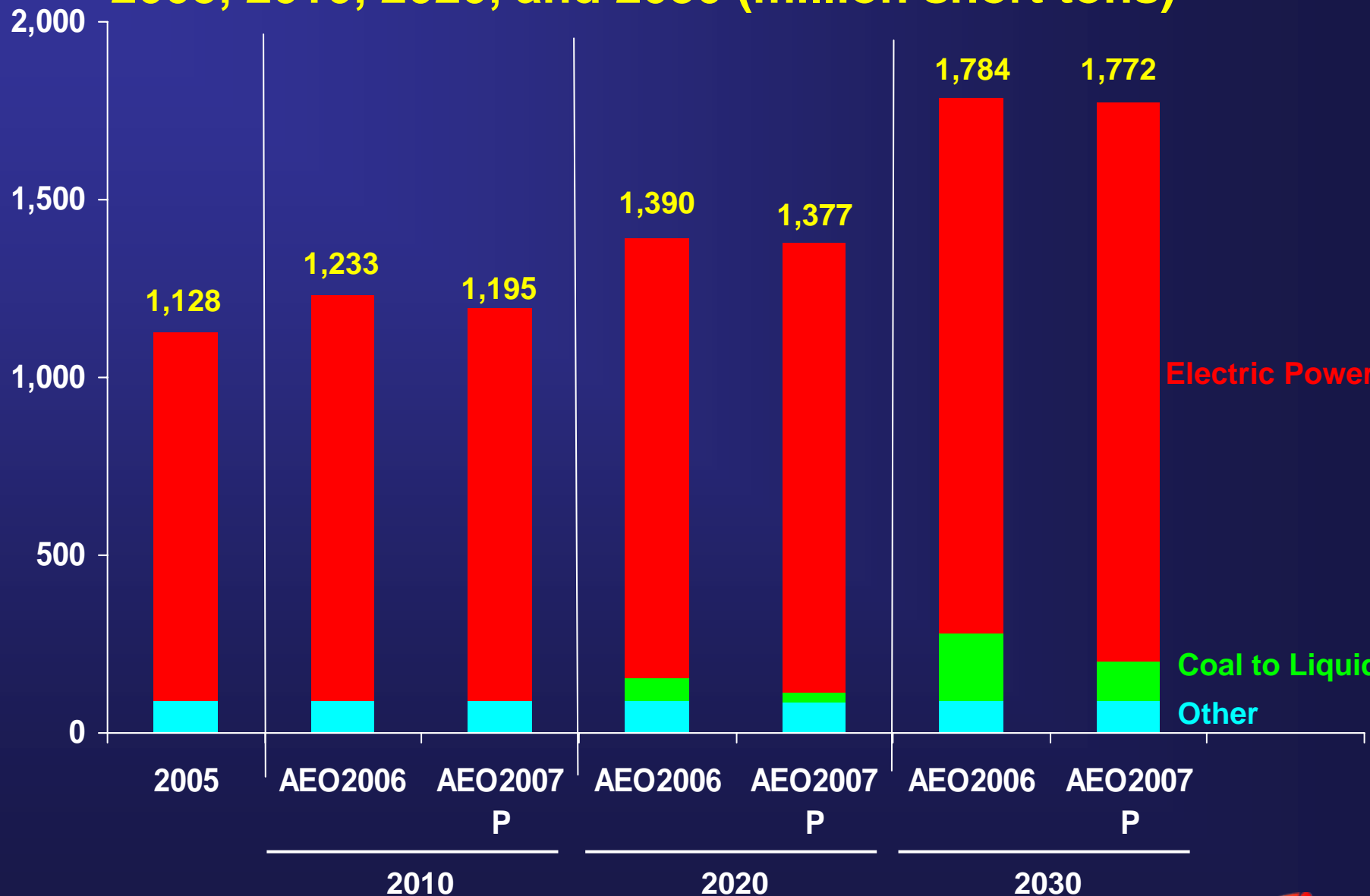
# U.S. Net Imports of Natural Gas, 1990-2030 (trillion cubic feet)



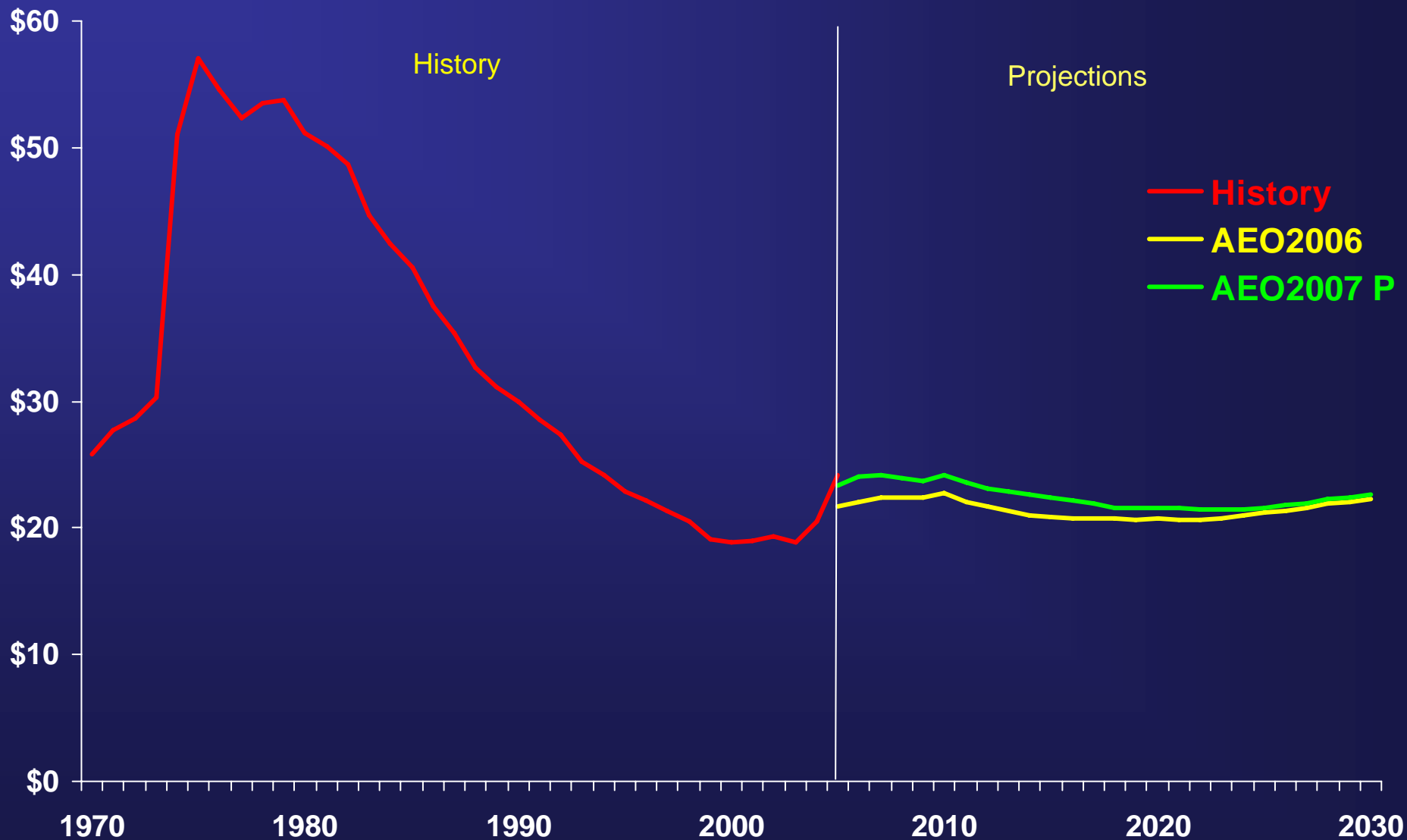
# U.S. Natural Gas Wellhead Price, 1970-2030 (2005 dollars per thousand cubic feet)



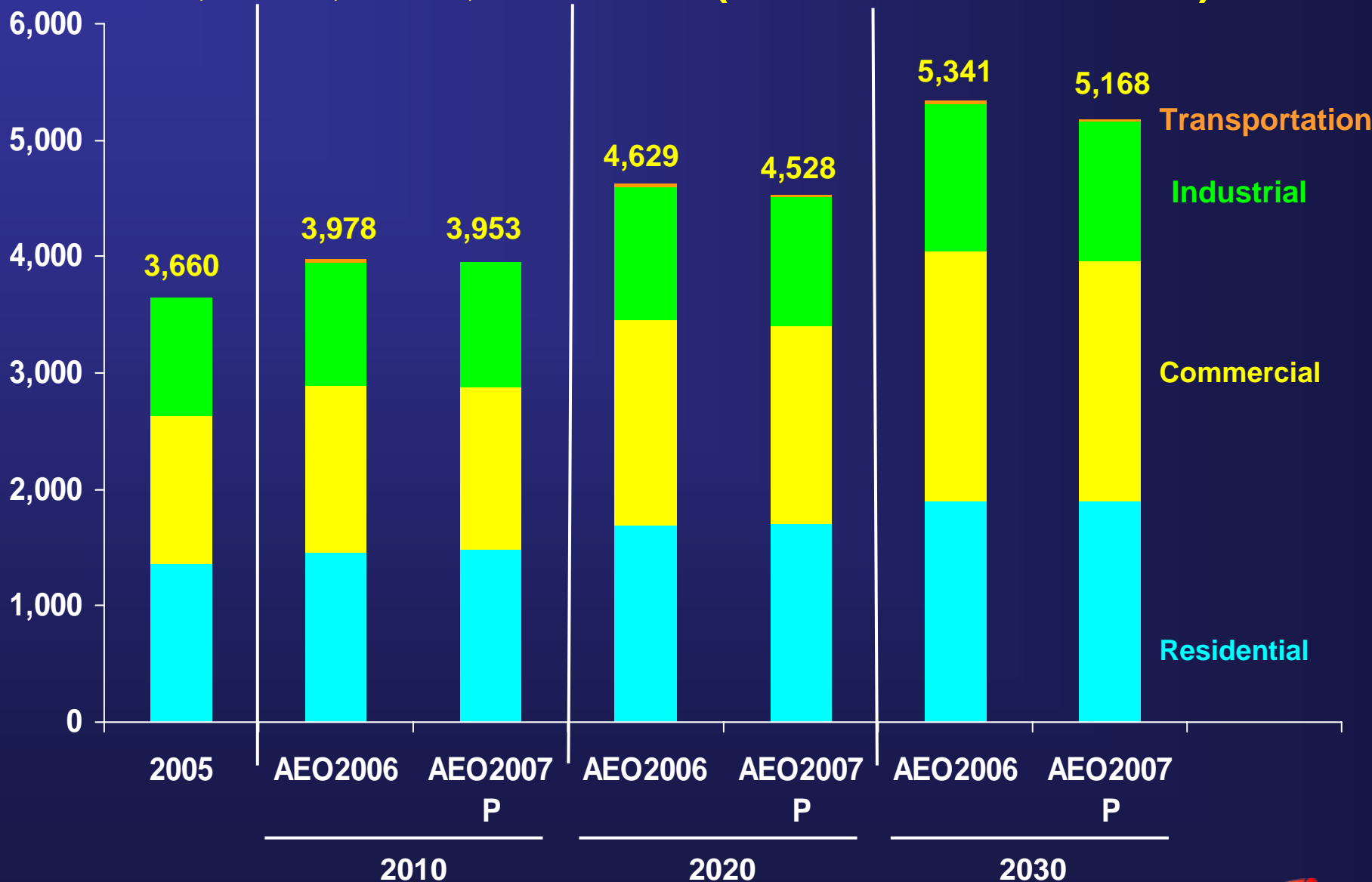
# U.S. Coal Consumption by Sector, 2005, 2010, 2020, and 2030 (million short tons)



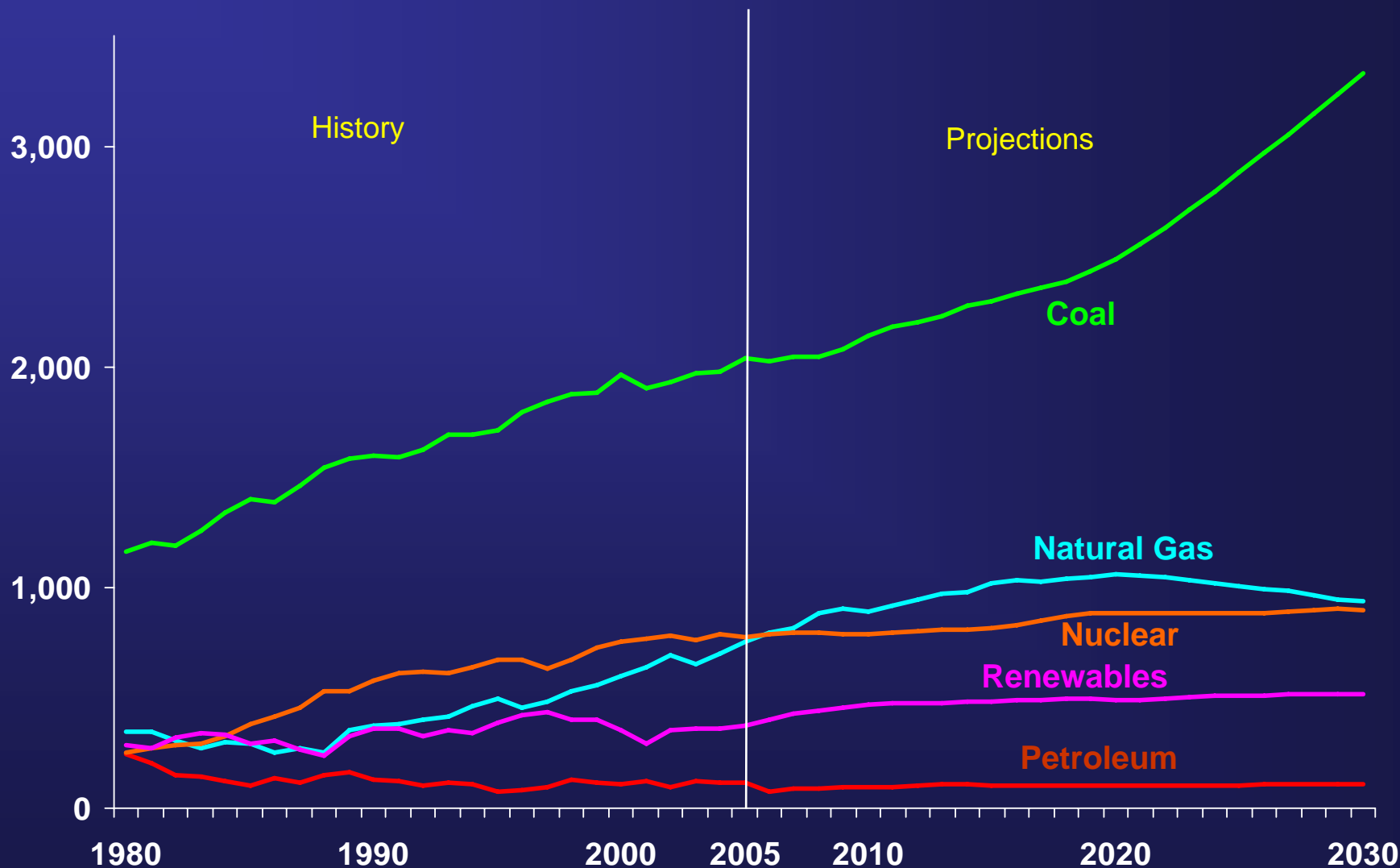
# U.S. Coal Minemouth Price, 1970-2030 (2005 dollars per short ton)



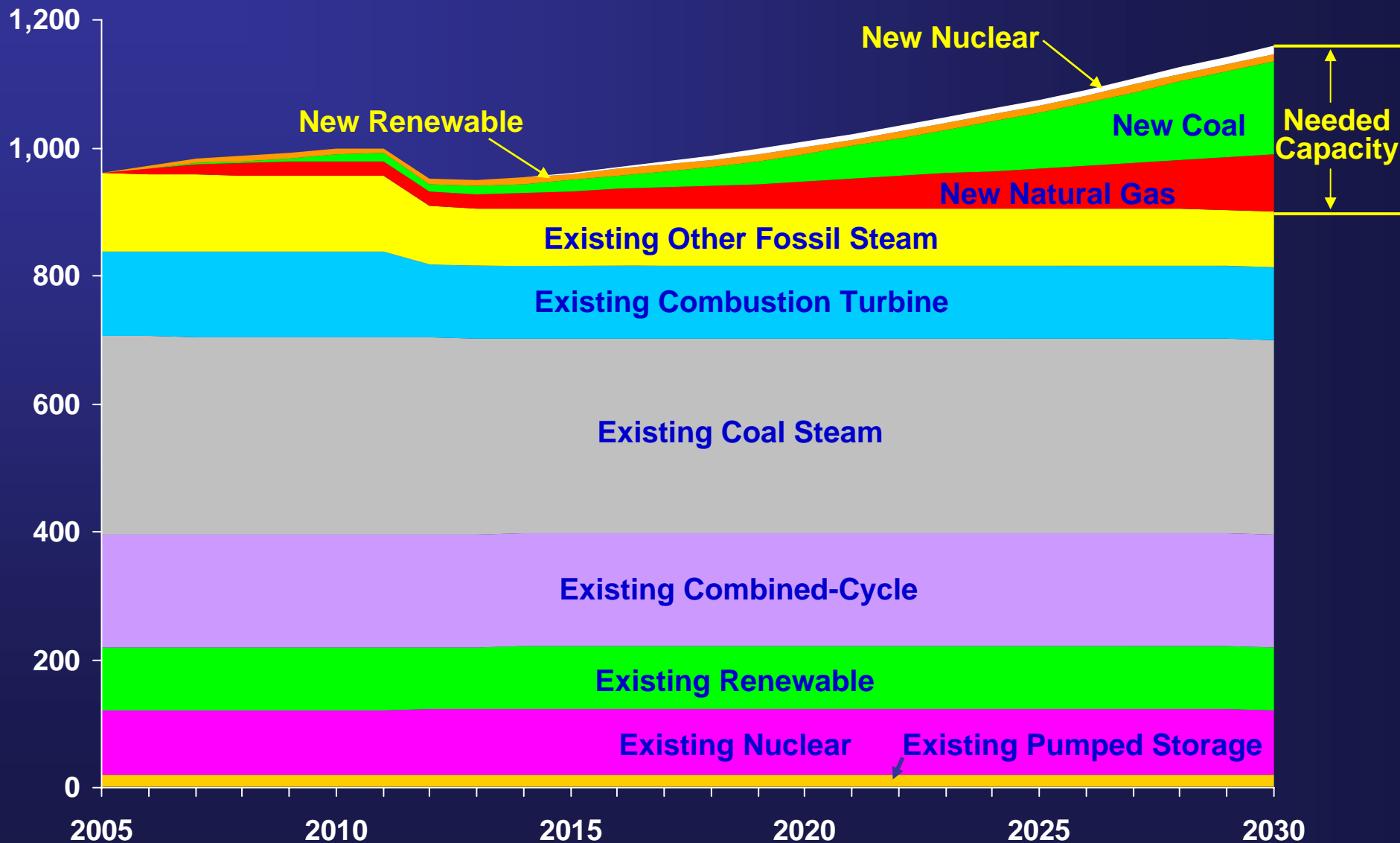
# U.S. Electricity Sales by Sector, 2005, 2010, 2020, and 2030 (billion kilowatthours)



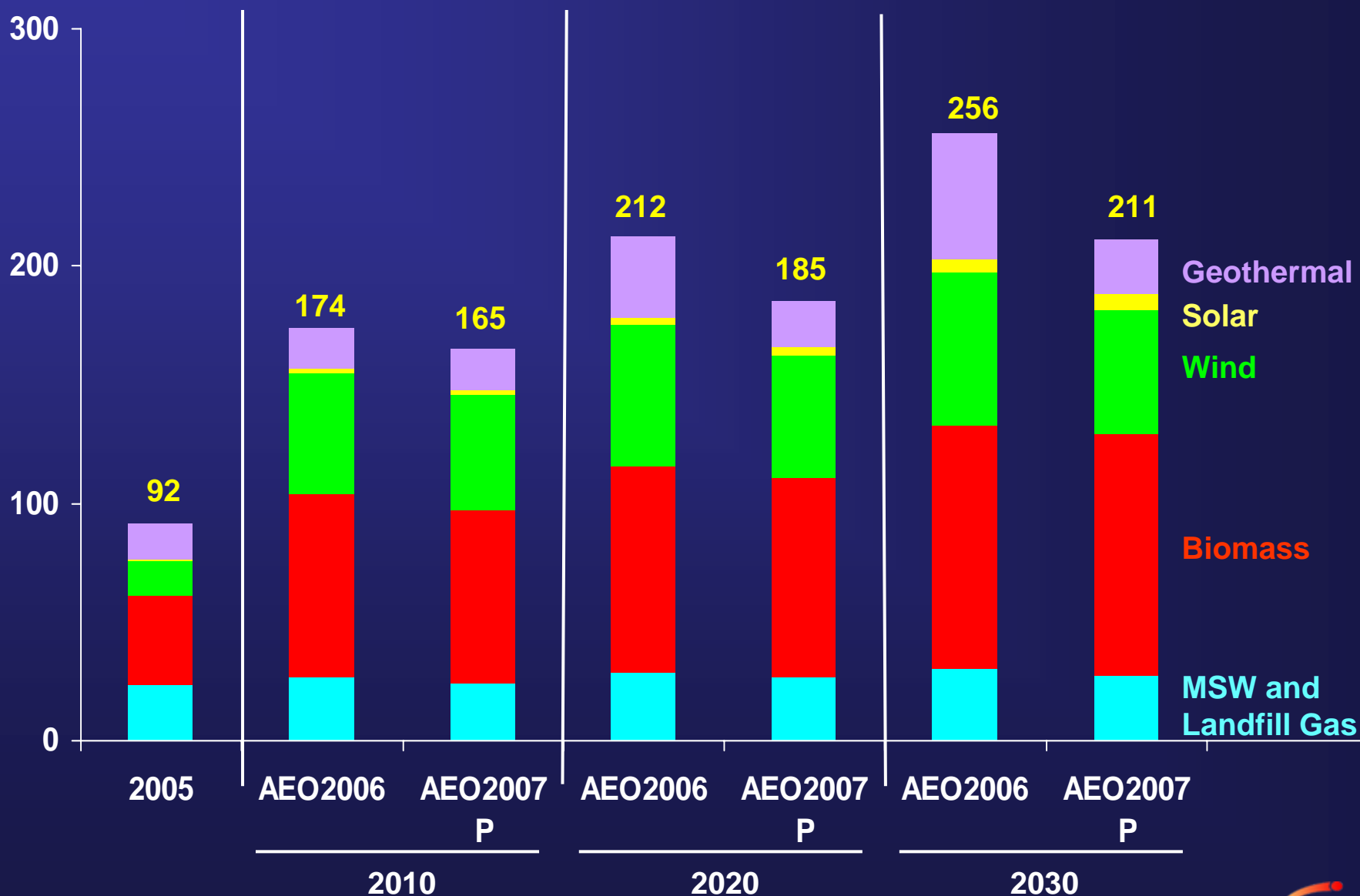
# U.S. Electricity Generation by Fuel, 1980-2030 (billion kilowatthours)



# U.S. Electricity Generating Capacity, including Combined Heat and Power, 2006-2030 (gigawatts)

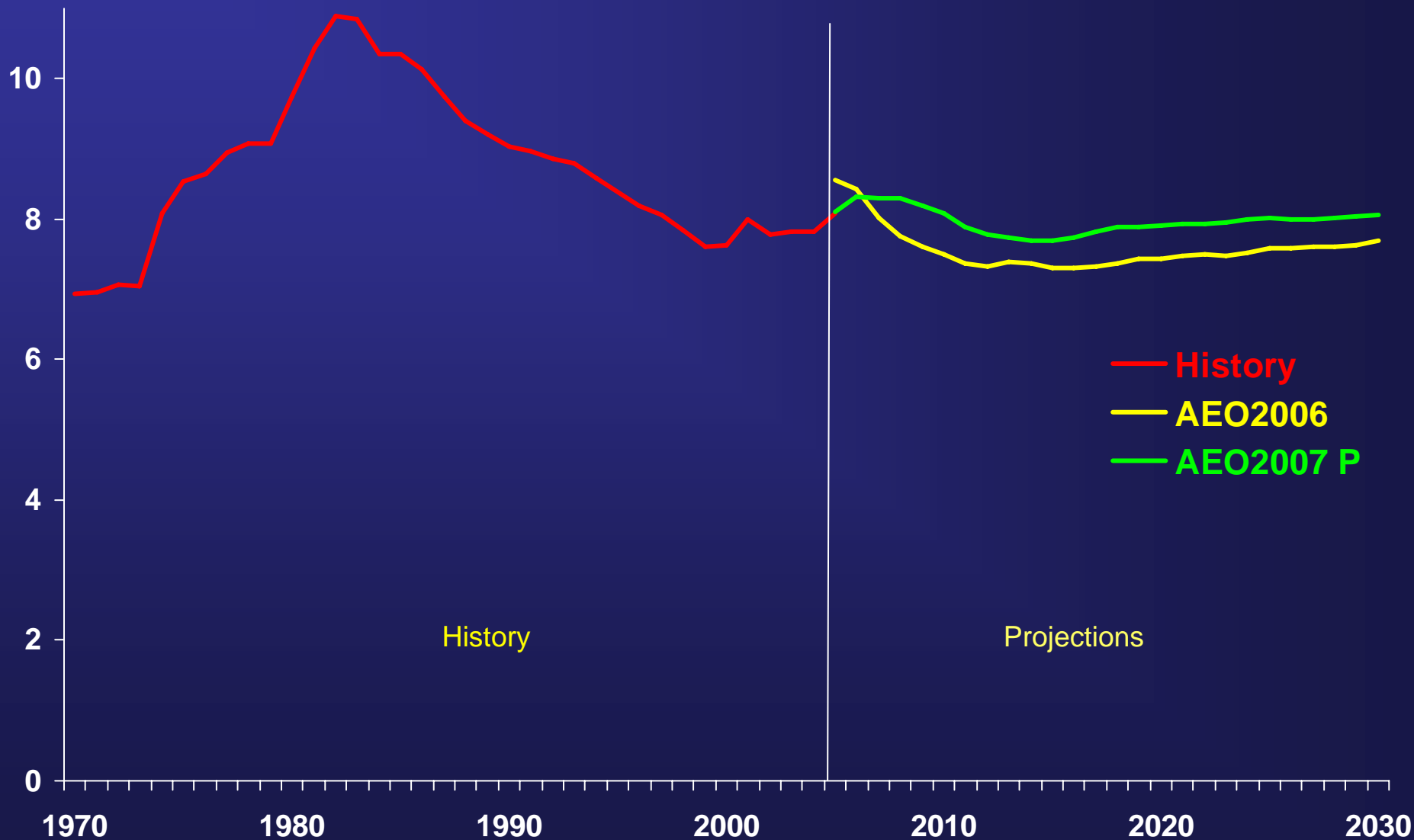


# U.S. Nonhydroelectric Renewable Electricity Generation, 2005, 2010, 2020, and 2030 (billion kilowatthours)

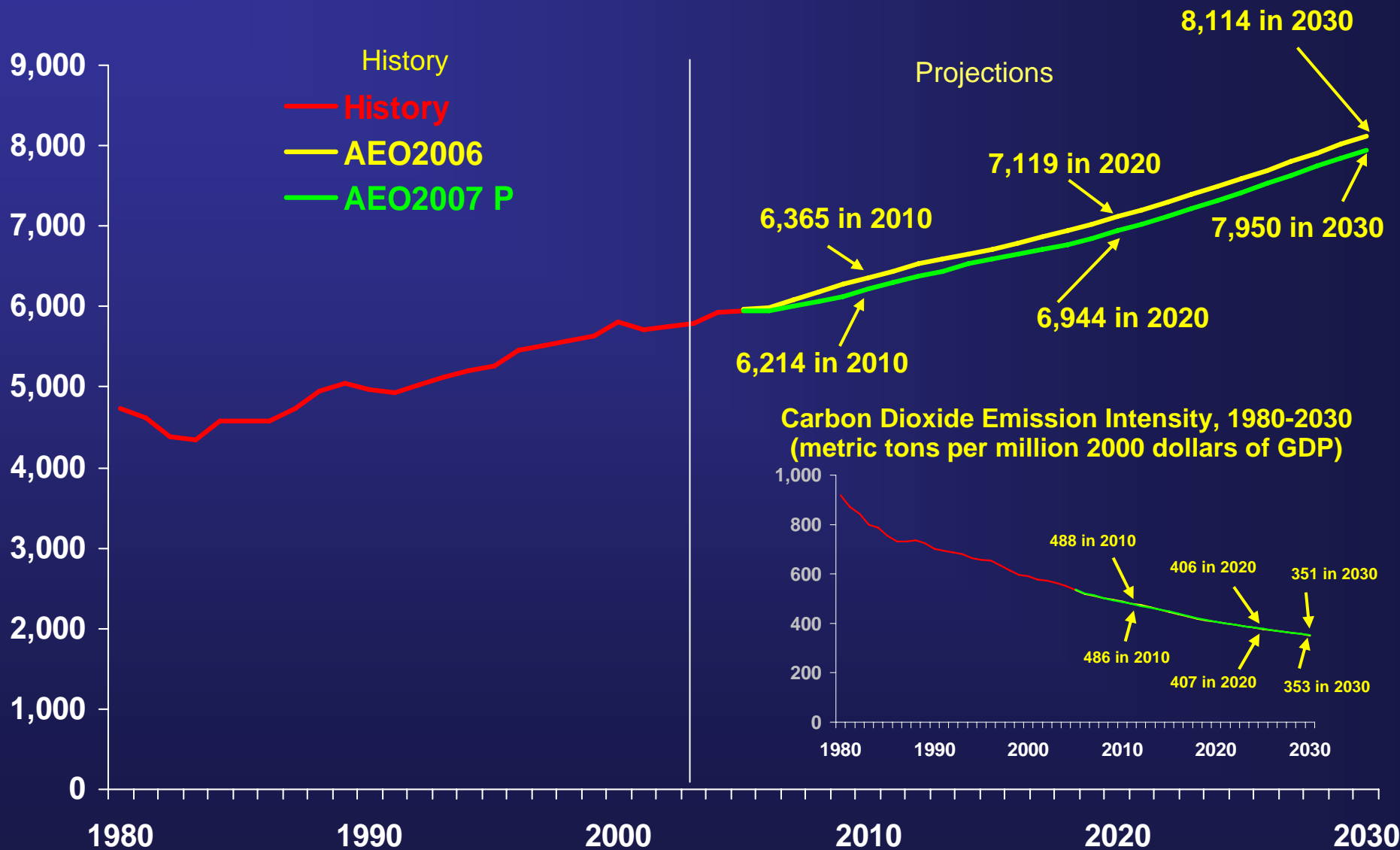




# U.S. Electricity Price, 1970-2030 (2005 cents per kilowatthour)



# U.S. Energy-Related Carbon Dioxide Emissions, 1980-2030 (million metric tons)



## ***Annual Energy Outlook 2007* reference case indicates that through 2030....**

- U.S. energy demand is projected to grow at an average annual rate of 1.1 percent
- The energy efficiency of the economy is projected to improve at an average annual rate of 1.8 percent
- U.S. oil import dependency is projected to grow from 60 percent to 61 percent
- U.S. natural gas use is projected to peak around 2020
- Future growth in U.S. natural gas supplies depends on unconventional domestic production, natural gas from Alaska, and liquefied natural gas imports
- Carbon dioxide emissions are projected to grow at an average annual rate of 1.2 percent

## Periodic Reports

*Petroleum Status and Natural Gas Storage Reports, weekly*

*Short-Term Energy Outlook, monthly*

*Annual Energy Outlook 2007, reference case December 5<sup>th</sup>, report February 2006*

*International Energy Outlook 2006, June 2006*

## Examples of Special Analyses

*“Economic Effects of High Oil Prices,” Annual Energy Outlook 2006*

*Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge,*

*March 2004*

*The Global Liquefied Natural Gas Market: Status and Outlook, December 2003*

*“Restricted Natural Gas Supply Case,” Annual Energy Outlook 2005*

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